

Vol. 5 No. 9
November



\$2.25

CURRENT NOTES

The Newsletter For ATARI Owners

Published By

ACE

The Washington Area
Atari
Computer
Enthusiasts

Special Features

Atari Rep in VA
Computer Literacy
Atari at Work
Reviews:
Computer Ambush
Computer Baseball
Letter Perfect
Mudpies

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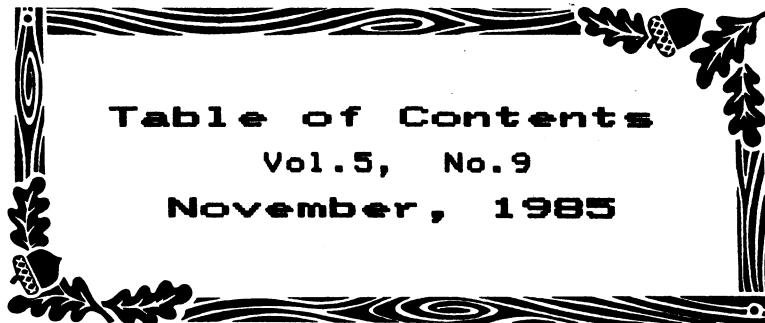


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C U R R E N T N O T E S

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CURRENT NOTES is published monthly (excl. January and August) by the Washington Area Atari Computer Enthusiasts (WAACE), 122 N. Johnson Rd., Sterling, VA 22170. WAACE is a federation of seven Washington area Atari User Groups (AURA, CPM, FACE, NCAUG, NOVATARI, SMAUG, and WACUG) which provide **CURRENT NOTES** as part of membership in the club. (See inside back cover for information on joining any of the clubs.) Direct Subscriptions to **CURRENT NOTES** are also available for \$15/year. Application to mail at second-class postage rates is pending at Sterling, VA. POSTMASTER: Send address changes to Editor, **CURRENT NOTES**, 122 N. Johnson Rd., Sterling, VA 22170.

Exchange subscriptions to **CURRENT NOTES** are available to other Atari User Groups. Send exchange newsletters to Jack Holtzhauer, 15817 Vista Drive, Dumfries, VA. 22026. Material

in this newsletter may be reprinted provided **CURRENT NOTES** and the author, if applicable, are cited.

Opinions expressed in this publication are those of the individual authors and do not necessarily represent or reflect the opinions of any of the user groups none of which are affiliated in any way with Atari Corp.

Advertising rates: full page, \$70; half page, \$40; quarter page, \$25, business cards, \$10. Discounts available for pre-paid multiple insertions (5% off for 2 ads, 10% off for 3 ads, 15% off for 4 ads, and 20% off for 5 ads). Submit photo-ready copy to editor by the 12th of the preceding month. Circulation: 2,000 (Members 1,050, Store Sales 700, Other 250).

Back Issues: A limited number of back issues are available for \$2.00/copy (1984: Feb, Mar/Apr, Jun, Jul, Oct, Nov; 1985: Feb, Mar, Apr, May, Jun, Jul, Sep).

The Editor of **CURRENT NOTES** is Joe Waters, 122 N. Johnson Road, Sterling, Virginia 22170. (703) 430-1215. Submissions of articles or advertising copy, subscription requests or back-issue orders should be sent to the editor. Deadline date for articles and advertisements is the 12th day of the preceding month.

Editorial

I was determined to keep this issue down to 40 pages this month. Alas, I failed. Once again we have 48 pages filled to the brim with Atari news, reviews, and programs. All of our regular columnists are here with the exception of me. I skipped ST World this month, in part, because the highlights from the Neil Harris talk at the October Novatari meeting have quite a bit of interesting ST news. I will mention, though, that the WAACE ST library has added three more disks: #13 DEGAS Picture Show, #14 NEOCHROME, and #15 STWRITER & DOCS (Order from editor for \$4.25 each plus \$0.50 handling).

Now is the time to look to getting some of those Christmas gifts. To that end, Bob Kelly gives you his picks for the year while M. Evan Brooks surveys virtually the entire spectrum of available war game software. Want to see what is new -- and actually on the dealers shelves now? Check out Jack Holtzauer's New Products column. For some in-depth evaluations of new programs, take a look at Roland Gabeler's evaluation of Lode Runner's Rescue, Kenn Lara's review of Computer Baseball, and Frank Sommers analysis of Mudpies. Dick Knisely provides a whole new perspective on war games with his review (screenplay?) of Computer Ambush. And, finally, Lila Kelly continues our series on Word Processors with a detailed examination of Letter Perfect.

Once more we have not neglected the programmers in the audience. Susan Wolff takes a look at the key components of a complete program in computer instruction and, as usual, includes a sample LOGO program to show you how the students are doing. Action! programmers are in for a real treat. Jon Smith has provided a great little program that converts your Atari into a drum synthesizer. Want to put a clock in your programs? Take a look at the little Basic clock routine. And last, but not least, we welcome a brand new columnist, Mark Brown, who will help you experiment with good old Atari Basic. Mark's column, "Atari's Small Miracles" is dedicated to short, entertaining, and instructive Basic programs. Even the slowest typist will have no trouble keying in these little beauties in a matter of minutes. You can then sit back and marvel at the wondrous things your little computer can do.

That's quite a bit already, but we're not done yet. I had hoped to reprint the entire transcript of Neil Harris's presentation at Novatari. Unfortunately, I ran out of room and could only fit about three pages of the highlights. (We have the videotape available for any club that would like to borrow it for their meeting.) Mike Barnes, of Xlent, makes his case for more widespread use of the 8-bit line while John Barnes, of AURA, examines the urgency of acquiring "computer literacy." And finally, George Langworthy gives us another peek at the future in his CD Report.

For more local information, see the WAACE news section for club reports and the latest on this month's Atarifest '85. We have also included the WAACE Hot Line, a listing of members from around the region who are available to answer your questions on a wide variety of Atari related equipment and programs. If you'd like to

add your name to the list, be sure to give Georgia Weatherhead a call. I have also included a November calendar that lists the dates of various club meetings. Note also the addition of the first two "local" chapters of Novatari. I'd like to see a "local" chapter in every major town in Northern Virginia.

We are drawing to the end of 1985 and Volume 5 of CURRENT NOTES and it's time to start looking at how we want to structure things for next year. CURRENT NOTES has grown to quite a large size. WAACE membership, which includes about 200 subscribers from outside this area, has now passed the 1,000 mark while our total circulation now exceeds 2,000. As you might expect, it takes me quite a long time to put together this newsletter and to maintain all the accounting and administrative records. During this month, therefore, I will be meeting with officers and individuals from the various clubs who have been active this past year in supporting this newsletter to see if we can't arrive at some consensus on how to proceed for next year both with CURRENT NOTES and with WAACE. Any and all ideas are certainly welcomed.



=====

**WUN Chairman
and Vice-Chairman Named
Gigi Bisson, Antic Assist. Editor**

10/18/85 -- A high-energy online conference of the Worldwide Users Network Board of Directors last night elected users group presidents Joe Waters (NOVATARI) and Frank Nagle (BAAUG) as temporary chairman and vice-chairman of WUN.

Named temporary chairman of WUN was Joe Waters, president of the Northern Virginia Atari Users Group and editor of the ambitious CURRENT NOTES newsletter/magazine for Washington Area ACE. WUN members with policy suggestions or questions should contact Waters (74005,1270) via CompuServe email.

Frank Nagle, president of the Atari users group that serves Silicon Valley, BAAUG, was elected vice chairman. "I'm glad that Antic took the initiative to start WUN," Nagle said. "Now it's time for users groups to pick up the ball and run with it."

These changes mean that WUN policies will now be set by users groups. Corporations serving the needs of the Atari community will provide consultation and some logistical support. Specific procedures for accomplishing this are to be formalized during the coming months. The next meeting of the WUN Board of Directors will be scheduled for early November.

Atari representatives Neil Harris and Dave Duberman hailed WUN's new user-controlled direction. WUN co-coordinators Gary Yost and Nat Friedland stated that Antic would continue to provide backing for WUN -- also ANTIC ONLINE would continue to upload late-breaking news and specialized Atari information onto the WUN pages for reprint by members.

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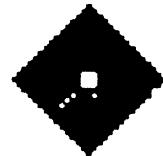
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ATARI SCUTTLEBITS

by Bob Kelly

November's column is usually devoted to the best buys in software and hardware for the upcoming Christmas/holiday season. However, before embarking on this annual effort, let me add a few words concerning last month's column.

Computer Industry Outlook

In discussing the home computer market last month, I made the statement "most analysts view the home market as stable, not one of rapid growth..... (this) means competition will intensify with the potential for another manufacturer to drop out - indeed one will go and it will not be Atari, in my opinion". In writing the above in mid-September, I had in mind doing a complete column on the decline in sales and consequent drop in stock value for Commodore. This, I thought was particularly relevant given the planned introduction of the Amiga. My instincts as well as the very preliminary market facts/rumors that I had gathered indicated that sales of the Amiga would not live up to expectations. I need not write this column on Commodore. I have been beaten to the punch. Read John Gantz in the September 16th issue of InfoWorld (Tech Street, "Will Amiga Save Commodore"). For those who can't get a copy of this issue, here are a few selective quotes to convey the tone:

Three recent events make me queasy about the Amiga's chances. The first was Mindset's Chapter 11 bankruptcy filing, the second was the report in this magazine on sagging sales of the Macintosh, and the third was some market research on home computer buyers I conducted.

So why was the Amiga announced, anyway? It is too expensive not to be used for business or professional purposes, yet the software it comes with consists primarily of graphics and games. It's Macintoshlike, but it's not a clone. It can run as an IBM PC (for a price and some space), but you wouldn't really put it in the same category as a Compaq or an AT&T personal computer. Except for graphic arts, slide presentations, or rudimentary desktop publishing - not markets that will buy 200,000 machines a year - I cannot see a market demanding Amiga computers. It's a first-time user machine, and there ain't many first-time users out there anymore.

My theory is that the Amiga will be disappointing for a number of reasons, not the least of which is the lack of a defined market. Problems with the distribution channel will also hamper sales. I also think the Commodore 128 (an 8-bit machine) will do better than most people might expect.

I differ slightly with some of the specifics in Gantz's column, but the general thrust is very similar to what I had planned to write - so I like it and am passing it on.

Software

It has been a rather slow year for the introduction of new software - not only for the Atari Computer. A shake-out within the industry occurred in 1985 and those software developers who remain are much more risk adverse.

Virtually little software worth its weight, other than the InfoCom adventure games, is presently available for the 520ST. I will ignore reviewing software for the 520ST in this column. However, a cautionary note, unless quality software does become available for the 520ST soon, Atari will indeed have troubles. As Batteries Included informed this magazine, roughly 75 percent of their software sales occur during the Christmas season - an astounding percentage. If quality software is not available for the 520ST at Christmas, when will it hit the market and what are the implications of prolonged delays for Atari? For now however, Atari appears to be holding its own financially.

It does appear that many of the software developers believe the eight-bit market is dead. While there is no doubt it has been weakened, the reports concerning its death are grossly exaggerated. I believe software developers are making a mistake (again I agree with John Gantz). Those who do have top-flight 8-bit programs on the market this Christmas will sell.

My recommendations regarding software are grouped into the following categories: Educational adventure/strategy games, action/arcade games, business and word processing, utilities, and telecommunications. My selection for the "Holiday Hit" of 1985 is presented at the end of this article.

I. Educational Adventure/Strategy Games

This category is not intended to cite software that teaches a child to count to 10. Rather, it is for those programs that offer an intellectual challenge and/or expansion of knowledge to teenagers and adults while at the same time having exceptional playability. There are two run-away leaders in this category - The Halley Project by Mindscape and Kampfgruppe by SSI.

The Halley Project has not been fully reviewed in Current Notes. It is a real-time space simulation. The fundamental premise is to navigate your space ship to distant planets, moons, etc., within our solar system. Skill levels are determined by timing missions. Let me say the graphics are awesome. The first time you orbit and land on a planet is truly an experience. Later, when you attempt to orbit from the dark side of a planet or moon the challenge increases considerably (hint, look at stars surrounding the body you're attempting to orbit).

My old college text book in Astronomy proved outdated for many of the mission clues. I did not fully appreciate the advances in our knowledge of the solar system in such a short period. I purchased the Guinness Book of Astronomy Facts and Feats by Patrick Moore (Sterling Publishing Co., Inc., New York) from the Smithsonian Institute's Air and Space Museum (\$12.95) as well as a map of the Solar System (\$4.00). The program itself retails for \$39.95 but can be found for under \$30.

Kampfgruppe was reviewed by Evan Brooks in the June issue of Current Notes. The premise is tactical warfare on the Eastern Front during World War II. This program is most appreciated by the advanced war gamer, however as Brooks points out "but constitutes a must have in every wargamer's library.... complex in scope, relatively simple in execution and elegant throughout..... SSI has come up with a true winner - Highest Recommendations."

As for myself, what sets this strategy game apart is the moving icons, custom scenarios, and simply terrific graphics for a game of this nature. This is a new level in war gaming. Kampfgruppe retails for \$59.95 but can be purchased around \$40 to \$45.

InfoCom has a few new adventure games on the market, Hitchhiker's Guide to the Galaxy and Seastalker (latter for early teens), which are above average and can be purchased for around \$27 each. I also recommend Broderbund's Mask of the Sun for the beginning to intermediate adventurer. It has great graphics and comes in at roughly \$25.

Finally, there is Chess by Larry Atkin (Odesta Software - Northbrook, Ill.). The ultimate Chess game with a very well written and thorough manual. Retail price is \$69.95, you will have to look hard to find it discounted (see review in October Analog).

II. Action/Arcade Games:

The array of arcade/action games available for the Atari's 8-bit line of computers continues to be impressive. My suggestions among the new and old are:

- Sky Fox (Electronic Arts): Not out yet for Atari; rumor has it that it will be available by Christmas and the graphics are dynamite. (Price? Guess \$30 range).
- Lode Runner (Broderbund): My wife's and many other's all-time favorite (\$25).
- Championship Lode Runner (Broderbund): Sequel, not out yet for the Atari; due out by Christmas. If Atari version is as good as others - watch out! This will go off store shelves fast (heroic guess - the low \$30 range).
- Kennedy Approach (Microprose) - One heck of a game. This is more than an action game, it is a ground controller simulation. Very playable and it has a voice track to simulate pilot response to your moves. Can be purchased in \$25 range.

-- F-15 Eagle Strike (Microprose) - Again more than a simple arcade game. You pilot an F-15 fighter plane and can be found for around \$26.

-- Bounty Bob Strikes Back - sequel to Miner 2049er (Big Five): \$30.

-- Summer Games II, new (Epyx): guess \$27 to \$30.

-- Great Cross Country Road Race (Activision): \$20.

III. Business/Word Processing:

SynFilet - The new 130XE version of this data base program is scheduled to be on your store shelves by November 1. This program was reviewed last November in Current Notes plus numerous articles since covering insights on use. The new version, developed by Synapse, will utilize the additional 64K of memory. While this program is not in the class of the business databases (dBase III, etc.), it is certainly a high value product considering its price/performance ratio.

Incidentally, the whole Syn series by Synapse is being upgraded to take advantage of the 128k in the 130XE. SynFilet is selling in the \$38 range.

Letter Perfect - This is currently my preferred Word Processor and is a product of LJK Enterprises. It comes with a dictionary program which is easy to use and saves the added expense associated with many other programs for a spelling checker. It is reviewed in this issue. LP can be purchased for around \$40 which is an excellent value. LJK also produces Data Perfect, a database program to merge files with Letter Perfect. The only uncertainty surrounding the current premier Atari word processor is when a 130XE version will be developed. Repeated calls to LJK have only yielded "it's on the drawing boards".

Paper Clip - This is the only real competition to Letter Perfect. Batteries Included has indicated that a 130XE version will be available early November, permitting around 80K of text to be stored in RAM as well as fixing some bugs in the present version. Paper Clip offers an impressive array of commands resulting in a professional word processor. If LJK sits on its laurels, Paper Clip may yet earn the title of "the most sophisticated Atari Word Processor". Paper Clip is selling in the \$40 to \$45 range. It does not, however, come with a spelling checker.

AtariWriter Plus - This is still not out. The word is that it will become available in mid to late November. Initial reports have been encouraging and there will be a version for the 130XE. I will guess at a selling price between \$40 and \$50. The jury remains out on this product and as of now I cannot recommend it. But, if it is available, consider its potential carefully before purchasing any word processor.

Print Shop - Not a business program, but rather a home applications program, Print Shop has paid for itself in our household. All our greeting cards, etc., are generated by Print Shop. Can be purchased within the \$30 to

\$35 range. Incidentally, there are graphic icon disks from either Broderbund (Print Shop developer) or Masuda Software (L & Y carries the latter locally). These graphic disks range in price from \$13 to \$20 depending on store and which company developed the software.

B-Graph - A business program by Batteries Included. This is an extremely powerful program which includes statistical analysis techniques (regression analysis, etc.) as well as high powered business graphic presentation capabilities. No other program comes close to this one for the Atari computer or, for that matter, most other home computers. The retail price is \$59.95 but it is selling near \$50.

IV. Telecommunications

To my way of thinking, there are only two programs available. The first is HomeTerm from Batteries Included and costs roughly \$30 (also database and simple word processor on same disk - sold under name HomePac). This was my "Holiday Hit" in 1984 and remains at the top of the list. Batteries has indicated that it will come out with an upgrade for the 130XE essentially permitting a download buffer of 60K instead of the current 7K. Sorry, the HomeTerm upgrade will not be available prior to Christmas (where do they learn marketing?).

The second program is public domain and free. It can be found on ARMUDIC -- AMODEM71 or purchased through the NCAUG group library (\$4.00, contact Mike Pollak, 6615 Cornell Drive, Alexandria, VA 22307). It (AMODEM71) does not have some of the bells and whistles that HomeTerm has (no configuration save capability) but it remains an excellent program. This you can "buy" for yourself.

V. Utilities

Not much in the way of new items in this category from previous years. The programs that come to mind are **CopyAll XE/XL** by Bruce Blake and **Typesetter** from XLent Software (Springfield, Va.). I have used Typesetter. It provides highly detailed (768 x 640 pixels) full or half page graphic/text displays. It is not an easy program to learn to use but the output is worth the effort. Typesetter can be obtained for \$30 or less.

CopyAll XE/XL is a one pass single density and two pass double density disk copier when using the 130XE. It will also work with the 800 and 800XL -- although requiring more passes to copy single or double density disks. It was written by an area member, Bruce Blake, and sells locally at most stores (Program Store - 7 Corners, L & Y, STS Video). The price is only \$14.75 retail.

Are you ready? The Holiday Hit for 1985 is **The Halley Project: A Mission in Our Solar System** by Mindscape. Rarely have I spent \$30 more wisely from an educational and recreational point of view. Santa should get plenty of orders for this program.

Next month, we will look at some hardware. Have a Happy Thanksgiving!

Looking for an IBM-compatible personal computer?

Despite the obvious charms of the Atari ST, Macintosh, and Amiga, growing numbers of people are buying IBM computers and compatible equipment. Let's face it: for many computer users, IBM technology is the standard.

Wait a minute, Atari fan. Before you bellow another curse into the night about the mindless "IBM-knows-best" attitude, before you launch into yet another sermon on the superiority of 6502/68000 technology, consider this:

Regardless of how much you (and I) love Atari, the fact is that most software development taking place now is in IBM software. IBM's may not be much fun, but they get the job done, by brute force if necessary, because of the wealth of software available for them. And you may not be aware that a great deal of good IBM software is inexpensive or free.

Now you can own a much-improved version of the IBM PC/XT and still crow about how much better—and cheaper—your system is than an IBM. Purists take note: it won't contain a single component made by Big Blue!

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GameViews

by Roland Gabeler

Lode Runner's Rescue

I must start this review by admitting to a bias (love) towards the original Loderunner. I read about the original but was not impressed with the concept of another climbing game shortly after becoming disillusioned by the increasing difficulty in Miner '49er. I remained uninterested until seeing the game demonstrated on the wide screen TV at Future Tech (RIP). I then purchased the game and spent literally hundreds of hours playing the game. I even played the game when miserably sick because it took so much concentration and mental involvement (pleasurably) that I could ignore my illness for hours at a time. Considering a huge collection of games, I can make that statement only for Lode Runner. So this game has a huge reputation to live up to right out of the starting blocks simply because it shares the name of one of the biggest hits in computer gaming.

So I booted it up, played it for 15 minutes, read the instructions (in that order, sound familiar?, or do YOU always read the instructions before booting the game?) and decided the game was not even close to as good a game as the original. But I was wrong. I now believe this version is more fun than the original! It just seemed to take longer to get it's hook into my mind and cause me to dedicate long hours of play to solving the puzzle each screen presents. Maybe I was setting my expectations too high and after coming down to earth I realized this program is a gem in it's own right.

This game is not only three dimensional, but your manner of evading trouble is a complete switch. In Lode Runner, you couldn't die from a fall, and you could burn holes to slow down or kill off the guards. In "Rescue", you can die from the wrong kind of fall, can't burn holes or really bother the guards in any manner, you simply run and evade the guards. However, as in the original, you can run faster than the guards. You do not earn an extra life simply by completing a screen, but have to work (sometimes very hard) for additional lives. The game is on two disks, one that loads the game mechanics and the second to load the screens.

The first screen is very easy and will help you to learn the diagonal movements and most likely how to hold the joystick at an angle. The screen spells out the name of the game and the basic play mechanics which call for you to collect all the gold flashing keys and step onto the flashing exit square to move to the next screen. There is only one guard and he walks a path and does not even know you exist. Your alter ego on the screen is a lady this time. (I'm all for liberation.) The maximum number of guards for any level is four, but, even though there are screens where there are NO guards, there are screens where they become very persistent in pursuing you.

The manner in which you earn extra lives is to catch a pesky cat on each screen. This task goes from easy on

the first to a real pain in later screens. However, I want to warn you, there are times when you have picked up all the keys and the cat is on the other side of the exit square, go around or leave one close key until after you grab the cat, or you are on your way to the next screen and lost the chance to add an additional life to your game. You begin with the life you currently on and three spares. The scoreboard will only show up to five lives, but you can have as many as you can accumulate. You get another free life at each ten thousand mark in score.

The screens vary in layout greatly which adds to the fascination of the game. They include barriers for you to climb, rivers you can swim (cute animation), and gaps for you to jump. The 3D effect becomes part of the problem in solving the screens as optical illusions sometimes fool you. As in the original, they aren't all progressively more difficult, they give you a few easy ones every now and then. A feature mentioned in the rules is eating a mushroom and growing taller. You will not see a mushroom until you reach the seventh screen, then you have to eat the mushroom to complete the screen. When you eat a mushroom the girl doubles in height and because of her longer legs, can jump further and survive a higher fall. Normally, your lady can survive a fall up to two bricks high, when tall, she can survive three. Speaking of climbing, listen carefully to the sound effects, as you climb, the pitch goes up. Soon you will rely on those sounds to tell you clues to your progress.

In screen five, there are no guards, it's you against the 3D layout. You can, and probably will, die a couple of times before you will solve it even when the guards aren't around. I feel this is the first screen where you really appreciate the 3D layout and this is where I felt the hook start to make me love this game. By the way, the cat sometimes disappears into the scoreboard on this screen, follow and keep jiggling your joystick and you catch the cat several inches behind the score. Then wiggle your lady back out.

Trap doors first appear in screen nine. The guards become the biggest pain starting on screen eleven, but in later screens, they vary their attack.

A couple of things I wasn't too pleased with, were a lack of a saved score, and no attract mode for you to watch and learn from, as in the original. Also, I left this game on unattended for a half hour and returned to see no color rotation on the monitor! I suggest you beware of that on any game. Maybe the computer (130XE) was supposed to handle that, I don't know, but it worries me to go back to the possibility of burning images again.

As my friends tried this game, they too were disappointed at first because of the differences between this game and the original. But when you play it long enough to forget the original and begin to enjoy the new features, the original pales by comparison. Try it for more than 15 minutes or past the fifth screen. I'm confident if you liked the puzzles of the original, you'll love this one.

Going Online

By Ed Seward

The winter months normally see an increase in the amount of telecomputing or BBS'ing done by computer owners. Many of you have heard about the numerous advantages of subscribing to CompuServe. For Atari owners the biggest advantage is SIG Atari. So this month I am going to take a look at some of the commands used within the SIG and how to minimize your access time by not using the menus. (The commands used within SIG Atari are standard for all the Forums on CompuServe.)

I am not going to cover the features of SIG Atari here as they have been covered in numerous publications. The two areas I am going to cover are the message bases and the data libraries. The message bases are great for keeping up with the latest ASTari news and for getting a question answered. The data libraries containing about 3,000 files are another great resource.

Changing Your Options. Let's start with the menu that is displayed upon entering the SIG. If you feel comfortable with the commands within the SIG then try the following steps from the Function Menu. Enter "OP [RETURN]" to enter the user options. There are three helpful changes on the first page of options; use menus, use brief prompts and type waiting messages. These are initially set to YES, NO and NO respectively. Change the settings to NO, NO and YES. (If you do not feel comfortable doing without the menus then practice by using the commands from the menus instead of the numbers in the menus). By making the above changes you will just be given the prompts. Thus you save a lot of time just by getting rid of the repetitive display of the menus. If you need help, just enter "? [RETURN]" and you will be given a list of commands. The type waiting messages option will actually display the whole message instead of just notifying you of a waiting message.

After making the above changes, follow the directions for additional options. Here there is only one change I would recommend - toggle the stop after message option. This will save you the time required to repeatedly request the next message. After this change enter "T [RETURN]" to return to the Function level. You will then be asked if these changes are for this session only or permanent. Try "S" for this session only to see how you like the changes.

Random Message Reading. The main function prompt is "FUNCTION:". Personally I like to take a look for messages on several subjects. The way we now have our options set make this nice and quick. Just enter "RS". Compuserve will request a search "FIELD:" -- I usually use "S" for subject. Then we'll be asked for a search "STRING:" -- try "HOMETERM". Now we are requested to enter a message number to start the search at. All the messages after the number entered containing the string in the subject will be displayed. We could save more time by entering the following string at the "FUNCTION:" prompt:

"RS;S;HOMETERM;135000 <RETURN>"

Quite a few commands can be linked using similar techniques.

Downloading. Another popular activity is accessing the Data Libraries. Just for reference let me mention the topics of the seven libraries:

- 0 - Education / General
- 1 - Games
- 2 - Telecommunication
- 3 - Utilities
- 4 - Graphics & Music
- 5 - ST Software
- 6 - ST Hardware
- 7 - Hot Rumors

The combinations I am going to show you make use of the "KEY WORDS" portion of each files description. (If you upload a file, don't feel like you have to limit yourself to only a couple of key words.)

Let's start by accessing the utilities library. From the "FUNCTION:" prompt just enter "DL3 <RETURN>". The commands used most often within the libraries are:

- BRO - browse or look through the descriptions of the specified files
- DIR - directory of specified files
- DOW - download a file
- KEY - define a string to look for in the key words portion of a files description or list the key words used in a library
- PRO - specify a downloading protocol

These commands can be linked by separating each command with a "/". Now the highest level prompt within library 3 will be "DL3:". If we want to see the latest files then enter "BRO <RETURN>". The same with "DIR" for a directory of all the files staring with the latest and working down to the oldest. We can also look at a specific file's description by entering "BRO" the filename and <RETURN>. If you know you want to download a particular file, such as EX1030.XMD, (for this example, I'll assume the Atari has been set up to receive XMODEM the file EX1030.XMD), enter "DOW EX1030.XMD / PRO XMODEM <RETURN>".

One can also look at files or a directory of files containg a string in the key words section. The fastest way to get a directory of the files with the key word "ACTION" would be "DIR / KEY ACTION <RETURN>" at the "DL3:" prompt. The same format would be used to look at the descriptions of those files using "BRO" instead of "DIR".

We can get a list of the key words and how many files are associated with each word by entering "KEY <RETURN>". When we are done we can sign off Compuserve at the library prompt by entering the command "OFF".

(Continued on Page 12)

New Products

by Jack Holtzhauser

As usual, this column is devoted to new products for the Atari actually appearing on dealer's shelves. Except where obvious, descriptions and claims are those provided by the manufacturer.

KENNEDY APPROACH

Microprose Software, 120 Lakefront Drive, Hunt Valley, MD 21030 (301) 667-1151.

You've got four incoming stacked up waiting for clearance to land. You've had to put them on hold to allow Air France 001, low on fuel, to come straight in. A severe thunder-bumper is approaching from the Northwest and you've got a window of only 15 seconds or so to decide whether to send American 142 on it's way to Montreal. You manipulate your joystick and hit your fire button. You hear your command echo from the speaker above your radarscope -- "AMERICAN 142 ASCEND TO 4000 FEET AND TURN RIGHT TO 090." American 142's pilot acknowledges with a "ROGER" and as his 727 starts to rumble down the runway, you turn your attention to Eastern 96, wiggle your joystick a couple of times, hit the fire button, and your command is issued -- "EASTERN 96 TURN LEFT TO 270 -- CLEARED TO LAND." The lowest aircraft in the incoming stack acknowledges your instructions, executes a sharp 90 degree left turn and starts its drop towards the runway. Just a few seconds sliced from the prime-time shift at the Air Traffic Control Center handling New York City's busy Kennedy and Laguardia fields.

As "KENNEDY APPROACH'S" packaging blurb claims, you can "see, feel and hear all the action! ... (it's) the FIRST simulation to include realistic high-quality speech right from your computer." And it works! It works quite well. Another nifty simulation from Microprose, Kennedy Approach offers you the opportunity to advance from a GS-5 to GS-12 (or higher?) rating at control centers in the Denver, Atlanta, Dallas/Ft. Worth, Dulles/National and JFK/Laguardia areas. "Bad weather, inflight emergencies, instrument failures, and all the other flight variables provide an ever-changing environment as many aircraft vie for the same runways." This one doesn't depend as much on joystick agility as it does on mental alertness and pre-planning. Priced at \$29.99

COMPUTEREYES

Digital Vision, Inc. 14 Oak Street, Suite 2, Needham, MA 02191 (617)444-9040.

COMPUTEREYES is a hardware/software product which claims to provide "an inexpensive way to capture real-world images on your Atari's Hi-Res display ... an innovative slow-scan device that connects between any standard video source device (recorder, camera, disk player, etc.) and the Atari's game ports. Under simple software control, a black and white image is acquired in less than six

seconds. Unique multi-scan modes also provide a realistic grey-scale images." Images captured by the COMPUTEREYES system are said to be compatible with Atari Artist, Koala Pad and many other popular screen dump utilities and the package supports both Graphics 8 (high-resolution) and Graphics 7.5 (four intensity level) graphics modes. Software included with the package provides machine language image capture routines and the Executive, a menu-driven file-handler. Many other software systems are said to be available to further manipulate the images -- annotate images with text, add lines, circles, boxes, etc., scroll and fill regions of images, and, of course, dump them to a printer having graphics capabilities.

Systems are available in several configurations, one of which includes a "high-quality" b/v camera. The basic system, including the COMPUTEREYES module (plugs into joyports), image acquisition and Executive package software, and owner's manual is priced at \$119.99.

KORONIS RIFT & THE EIDOLON

Lucasfilms Games, Epyx Computer Software, Sunnyvale, CA.

KORONIS RIFT and THE EIDOLON are the most recent releases from Lucasfilms/Epyx. Both are priced at \$29.99.

KORONIS RIFT is a one-player "strategy and adventure" game offering "realistic fractal graphics ... You're a Techno-Scavenger piloting a surface rover through the rifts of the legendary planet Koronis salvaging hi-tech weapons from the Ancients ... You'll contend against hostile alien guards and vanquish them by destroying their powerful base. To survive, you must seize weapons and shields from abandoned Ancient space hulks. The secrets of the Ancients are yours ... if you dare. Thru-the-cockpit-window perspective.

THE EIDOLON is also a first person adventure, strategy and action game using fractal graphics to create three-dimensional caverns. You're supposed to "...discover the secrets of the Eidolon, a mysterious 19th century machine powered by the forces of magic. If you can control the powerful energies of this ancient apparatus, an unseen world is yours to explore. The Eidolon lets you teleport and transform ..." various critters and challenge the "intelligent" Guardian Dragons. Whatever happened to the machine's mysterious inventor? "Only the adventurous of spirit will know his fate -- The Eidolon -- scientific curiosity or passport to a magical dimension."

HOME COMPUTER MAGAZINE

Emerald Valley Publishing Company, P.O. Box 70288, Eugene, OR 97401 (503)485-8796.

I recently received five unsolicited copies of this publication, Volume 5, Number 5, with the request that I introduce it to WACUG's membership. I had never seen nor heard of the magazine before maybe 'cause this was the first issue to include Atari coverage with those previously featured -- Apple, Commodore, IBM, and Texas Instru-

ments. I'm impressed and recommend it for your consideration.

First of all, it carries no commercial advertising, except for the magazine's own program disk and tape products! The editor claims this policy "allows the staff to provide unbiased product reviews which focus on true strengths and weakness, wherever the chips may fall ... and we don't have to worry about losing advertisers because of publishing software in the magazine that is 'too good'. Consequently, we can provide the best free software available anywhere."

I can't vouch for the accuracy of the later claim 'cause I haven't typed-in any of their programs as yet, but Howard Cosell ("I call'em like I see'em") would be proud of their product reviews. This month the magazine reviewed nine "print-ware" packages -- PRINTSHOP, etc. Some brief extracts:

...Operating this program was so easy that it was quite simply a lot of fun. And considering Select-A-Font's low price and all the features it offers, this is one program that ranks high on the cost/benefit curve.;

...Despite the attractive package, the best we can say for Facelift is that it is appropriately named. Just a facelift cannot cure old age -- only hide the wrinkles. Facelift's elegant wrapping does little more than conceal debilitating flaws.;

...In general, Fancy Font is an exercise in frustration. It offers many features, but is much more complicated than it needs to be. Its manual is unclear, and assumes that the operator has a very good understanding of computing and coding. At \$180, it is far and away the most expensive program we examined for this review, and frankly, we don't think that it warrants such a high price. Computer neophytes would be better off to look elsewhere for a typesetting program.

This issue of Home Computing offers the first appearance of an Atari-specific column, the "Atari Atrium", featuring, this month, a four-voice sound-on-sound recording tutorial. The Tech Notes section for the Atari provides a variable cross-reference utility.

Also included are five featured programs for all of the computer families covered. They range from a war-game simulation to an electronic typewriter utility. The magazine provides a computer-specific discussion page covering each of these programs. This page, The Programmer's Window, provides a schematic of the program, a directory and function statement for all the variables, an annotation of the program line listing and a remarks column, the latter focusing on how and why the program works on your particular computer.

One year's subscription (10 issues), including two disk or tape versions, is priced at \$25.00. Individual

disk/tape versions are priced at only \$4.95, plus \$1.00 shipping and handling (does not include magazine). Why not check with your group's officers to see if they also received complimentary copies. If so, arrange to take a look during your next meeting. It'll be worth your effort.

KARATEKA

Broderbund, 17 Paul Street, San Rafael, CA 94903

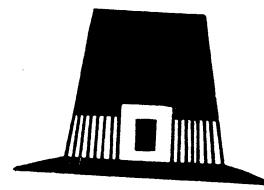
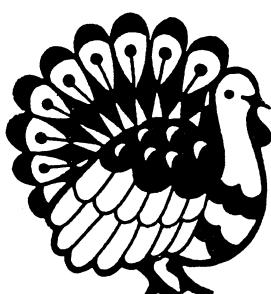
KARETKA, the long-awaited home version of the popular arcade game, claims a "suspenseful, movie-like story; smoothly animated characters; scrolling backgrounds and realistic karate fighting." The scenario? "...Returning home after years of study under a Master of Karate, you find your village burned to the ground. Your friends and family are scattered, your bride-to-be stolen by Akuma, the warlord whose oppressive shadow has darkened your village since before you were born ... Along, armed only with your knowledge of karate, you must outfight Akuma's vicious warriors, each one more powerful than the last. Fight on, deep into the heart of the palace, where to rescue Mariko you must confront the cruel Akuma himself in hand-to-hand combat." I dunno. That sounds like a lot of unnecessary bother. I think I'd just take along my .45 and a couple of extra clips. Better yet, why not just give Rambo a call?

* * * * *

Going Online (Continued from Page 10)

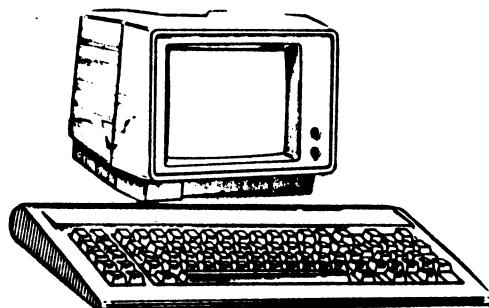
Some cloning words. The steps I have outlined above may not seem like they make a big difference, but the time wasted with menus adds up fast. For example, without the menus I can sign-on to Compuserve, enter the SIG, see if there are any new telecommunications files and then have the search going for messages on a particular subject in three minutes. Using the menus it used to take seven or eight minutes. Think of how much more you can get done now, once you get used to using the commands instead of the menus. Also by making the changes within the SIG, they do not affect your options outside of the SIG so you still have the menus on the rest of Compuserve.

Well, have a nice Thanksgiving.



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Battle Bytes

By M. Evan Brooks

An Overview of Wargames

With Christmas rushing upon us, and lights already being strung in preparation for the Season, it is time to look at wargames available for the Atari so you can make an educated decision for purchases for yourself or for gifts.

In deciding upon the aspects of a computer wargame, there are certain choices that one has to make. Usually, levels of difficulty range from introductory to intermediate to advanced, with gradations shading between these three parameters. In addition, the primary medium must be considered: land, sea, and/or air; and finally, the level of simulation -- tactical (man-to-man up to company-level), operational (battalion level to division level) and strategic (corps level to theater army or higher). This review will delineate the games available by levels of difficulty. Within each level, the subject game will be characterized by its medium (the primary medium will be noted in capital letters), simulation level and overall recommendation (or avoidance). If the game has been reviewed heretofore, the issue of Current Notes is noted. Overall recommendations are noted by asterisks following the game title:

* = do NOT buy;

** = buy ONLY if interested in this period

*** = recommended

**** = highly recommended

***** = a MUST HAVE.

Introductory Level

AFTER PEARL (****) [SuperWare, c. \$20] A strategic simulation of the War in the Pacific (1941-1945), the game bears little resemblance to history. However, it is fun and quick to play (c. 45 minutes for the campaign), as well as economical. Recommended for the novice; a real "player". (CN, February, 1985) [SEA/AIR]

BROADSIDES (*****) [SSI, \$39.95] A tactical simulation of ship-to-ship combat during the Napoleonic Wars. With both an arcade and tactical option, one may add layers of difficulty at his own pace. Quick play-times and ease of operation make this a necessity in any wargamer's library. Highest recommendation. (CN, September, 1984) [SEA]

COLONIAL CONQUEST (***1/2) [SSI, \$39.95] A strategic and economic simulation of the Age of Imperialism. The manual is more difficult to comprehend than the game is to play. Multiple-player interaction is strongly recommended. A cross between the board games of Risk and Diplomacy. (CN October, 1985) [LAND/SEA/ECONOMIC]

COMBAT LEADER (**1/2) [SSI, \$39.95] A tactical simulation of armored warfare (squad/platoon) over the last 40 years. With built-in as well as design-your-own scenarios, the game offers a myriad of options. Graphics are quite primitive, but the scenarios are quick as well as valid learning tools. [LAND]

EAGLES (**) [SSI, \$39.95] A tactical simulation of aerial combat during World War I. The ability to design-your-own scenarios as well as those already existing in the game offer hours of fun. However, realism is moderately low, and the slow pace of the game can deter the only mildly-interested. Nevertheless, the only simulation covering this period. [AIR]

EASTERN FRONT (*****) [APX] An operational/strategic simulation of the German invasion of Russia during World War II. The cartridge version offers beginner scenarios and leads one into the more advanced scenarios, covering both the 1941 and 1942 campaigns. This is the oldest simulation covered, dating back to 1978. It is still an essential component to any wargamer's library, and bears the HIGHEST recommendation. Please note that the current discounts have the cartridge version discounted down to \$2.99. You can not afford to pass this one by! (CN, July, 1984) [LAND]

FIELD OF FIRE (**1/2) [SSI, \$39.95] A tactical simulation of squad operations on the Western Front during World War II (follow Easy Company on its WWII operations!). Scenarios are varied and enjoyable; however, this reviewer is not overly enthused about the historical accuracy and lessons learned from this simulation. Nevertheless, it is a good introduction to computer wargaming. [LAND]

FIFTY MISSION CRUSH (**) [SSI, \$39.95] A tactical recreation of the bomber offensive against Germany during World War II. Realistic, but dull, with little room for player abilities. (CN, November, 1984) [AIR]

LEGIONNAIRE (**) [AH, \$21, at discount prices] A tactical (?) simulation of warfare by the Roman legions against various barbarians. Quickly learned and playable in a single sitting, it bears obvious relation to its more famous ancestor (Eastern Front). Not as successful as its ancestor, but a good introduction to computer wargaming, as it combines aspects of arcade and wargame play. [LAND]

NAPOLEON AT WATERLOO (**) [KRENTech, \$34.95] An operational simulation of the most famous battle in history, this game has the potential to be great. However, execution leaves something to be desired; historical accuracy and teaching of valid lessons is a definite minus. The latest version offers multiple options, and perhaps some of these weaknesses have been corrected. It remains the only playable Napoleonic wargame. (CN, July, 1985) [LAND]

OPERATION WHIRLWIND (**1/2) [Broderbund] The ancestor of Field of Fire, this tactical simulation offers an assault on a city during World War II. In many ways, it is more interesting than its descendant, but is difficult to find available for sale. [LAND]

SARATOGA (\$) [APX, \$19.95] An Eastern Front clone, this operational/strategic game recreates the American Revolution in 1777. Available from Antic magazine, its current marketing destroys its game value; with documentation on the disk flip side, the lack of a map (specifically referred to in the documentation) makes the game almost unplayable. A classic case of BAD marketing technique. [LAND]

SHILOH, THE BATTLE OF (\$\$1/2) [SSI, \$19.98] An early effort to recreate the famous Civil War battle on an operational level. Easy to learn and play, this game is not so much an historical study as a "beer and pretzels" wargame. Still fun to play, although the graphics and inputs are primitive. [LAND]

SIX GUN SHOOT-OUT (\$\$) [SSI, \$39.95] A tactical man-to-man simulation covering famous Old West situations (both historical and Hollywood). Primitive graphics detract from this simulation, but it is quick and easy. (CN, September, 1985) [LAND]

TIGERS IN THE SNOW (\$1/2) [SSI, \$39.95] An operational simulation of the Battle of the Bulge during World War II. With graphics and play mechanics superseded by the state of the art, this game's appeal is limited. [LAND]

Intermediate Level

BATTLE FOR NORMANDY (\$\$1/2) [SSI, \$39.95] An operational simulation of the Normandy invasion, this game is moderately easy to learn (although the beachhead landing rules leave a lot to be desired). A real player, it suffers somewhat from lack of joystick input. But overall, highly recommended as a solid intermediate game. (CN, March, 1985) [LAND/AIR]

CLEAR FOR ACTION (1/2) [AH] A ship-to-ship simulation, a la Broadsides. However, this simulation is broader in scope and allows for multiple ship actions. With potential for greatness, its execution dooms it; primitive graphics coupled with horrendous user interface make this simulation a slight step above the "Canines of Combat" below. [SEA]

COSMIC BALANCE I,II (\$\$1/2) [SSI, \$39.95 each] Space opera, Cosmic Balance I is a tactical simulation of space combat a la Star Trek. Input is via keyboard, and the graphics are primitive. Cosmic Balance II offers a strategic expansion of the Cosmic universe through emphasis on economic expansion. Somewhat dated by later efforts. [SPACE]

CRUSADE IN EUROPE (\$\$\$) [Microprose, \$34.95] An operational strategic simulation of the Western Front during World War II, the scenarios offer more value for the money than most other games. The campaign suffers from a certain lack due to the artificial intelligence, but for the intermediate player, its mechanics and play give this game a high recommendation. (cf. this writer's review in Computer Gaming World, Nov-Dec 1985.) [LAND]

DECISION IN THE DESERT (\$\$\$1/2) [Microprose] The latest offering from Microprose, this operational simulation of the Desert Campaign offers a fascinating study, which will teach the intermediate player true aspects of desert warfare. Highly recommended. (cf. this writer's review in Computer Gaming World, Nov-Dec 1985.) [LAND/AIR]

EXCALIBUR (\$\$\$) [APX] A strategic simulation of Arthur's attempt to forge a kingdom out of the British Isles. While introductory in play mechanics, the sheer scope of the game raises its playability level to that of intermediate. This is not intended as a criticism; the game is a wargame by default; its economic ramifications are the heart of this fine simulation. Rarely available for sale anymore, it remains a fine game and a worthy addition to one's library. [LAND]

KNIGHTS OF THE DESERT (2) [SSI, \$39.95] An operational simulation of Rommel's Desert Campaigns in North Africa during World War II, Knights was the first SSI game to offer multiple stacking of units in the same hex. The concept was a failure here. Slow and ponderous, its recreation of the African Campaigns does not deliver its promise. [LAND]

MIDWAY (\$1/2) [AH] An operational/strategic simulation of the Midway campaign, this game has been overtaken by improvements in the state of the art. Graphics are extremely primitive. [SEA/AIR]

PARIS IN DANGER (1/2) [AH] An early game, superseded by newer efforts, this operational/strategic simulation of Napoleon's 1814 Campaign suffers from poor graphics and lack of solitaire playability. [LAND]

NATO COMMANDER (\$\$) [Microprose, \$23, discounted] An operational/strategic simulation of the next war in Europe, this reviewer is more fond of the game than the designers currently are. While the mechanics are relatively easy to learn, playability in the larger scenarios is limited. Still recommended overall. [LAND/AIR]

PANZER JAGD (\$1/2) [AH, \$21 discounted] A tactical simulation of armored warfare during World War II, it is obviously dated by newer efforts. [LAND]

ROME AND THE BARBARIANS (\$\$) [KRENTZ, \$34.95] A strategic simulation of the Fall of Rome. Easy game mechanics coupled with difficult strategic decisions make this a real player. Recommended for the aficionado. [LAND]

T.A.C. (\$1/2) [AH, \$26, discounted] A tactical simulation of armored warfare during World War II. Covering a subject similar to Panzer Jagd, it suffers from development obsolescence. [LAND]

Advanced Level

BREAKTHROUGH IN THE ARDENNES (\$\$) [SSI, \$59.95] An operational simulation of the Battle of the Bulge, this game suffers from poor graphics. Determining the road network is a lesson in frustration. While the rest of the

game appears workable, the frustration with map graphics will doom it to the dustbin of history. [LAND]

CARRIER FORCE (**\$1/2) [SSI, \$59.95] A tactical/operational simulation of the major Pacific carrier battles of World War II, this game is extremely slow in execution and its historical accuracy may be questioned in some areas. Despite these flaws, it covers its subject in an interesting way and is worth the effort for anyone desirous of learning about the period. (CN, October, 1984) [SEA/AIR]

CHICKAMAUGA (\$1/2) [GDW] A tactical/operational study of the Battle of Chickamauga, this game offers a plethora of detail. However, its graphics are so primitive that they doom the game before it gets started. One has come to expect more in graphics than this game can begin to deliver! [LAND]

COMPUTER AMBUSH (**\$1/2) [SSI, \$59.95] A tactical man-to-man simulation of patrolling in World War II. The graphics are somewhat primitive, but the detail somewhat makes up for this deficiency. (CN, April, 1985) [LAND]

GULF STRIKE (\$1/2) [AH, \$21, discounted] An operational simulation of combat in SW Asia now. Detail and historical complexities plus orders of battle abound. But the graphics are enough to deter all but the most determined. The map, in shades of orange and black, resembles a Big Mac run amok; also, user input is slow and tedious. [LAND/SEA/AIR]

IMPERIUM GALACTUM (**) [SSI, \$39.95] A strategic space empire-building game, this is a successor to Cosmic Balance II. More detailed, and potentially more interesting. [SPACE]

KAMPFGRUPPE (*****) [SSI, \$59.95] A tactical simulation of warfare on the Eastern Front during World War II, this game was Computer Gaming World's Game of the Year (1985), and has been the highest rated wargame in their survey. Multiple options abound; the only defect is user input via keyboard rather than joystick. Still, an essential wargame to the Wargamer's Library. (CN, June, 1985) [LAND]

OBJECTIVE: KURSK! (**\$1/2) [SSI, \$39.95] A tactical/operational simulation of the largest tank battle in history. Extremely detailed, although user input is via keyboard rather than joystick. Overall, somewhat bland as a result of the game system utilized. [LAND]

OPERATION MARKET-GARDEN (**) [SSI, \$49.95] A tactical/operational simulation of the World War II airborne operation. Similar to Breakthrough in the Ardennes (cf. supra), it suffers from the same defects. [LAND]

RAILS WEST (**\$1/2) [SSI, \$39.95] A strategic simulation of railroad expansion in the United States during the 19th Century, this is not a wargame per se. However, its economic "warfare" and educational value make it a fascinating product. [ECONOMIC]

REFORGER '88 (**\$1/2) [SSI, \$59.95] A tactical/operational simulation of the next war in Europe. More complex than NATO Commander, but suffering from the same defects as Objective: Kursk!. Both Reforger and Kursk utilize the same game system and lack a game "soul", although this game is somewhat the more successful. [LAND]

WAR IN RUSSIA (*****) [SSI] THE MONSTER GAME! Simulating the entire War in Russia (1941-1945), this game is easily learned and played. Sheer size presents the difficulty; despite this size and its problems with the artificial intelligence in the latter stages of the war, this is another essential addition to the Wargamer's Library.

"Canines of Combat"

These games are to be avoided at all costs. While generally unavailable today, their presence at sales or as gifts offer the potential purchaser one major advantage: the use of a disk to be formatted for new data. Need anything more be said: ARMOR ASSAULT, FLYING TIGERS, JAGDSTAFFEL, WORLD WAR III.



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Put Your Atari to Work!

by Michael Barnes

I am typing this article on the newest 8-bit Atari computer, the Atari 130XE computer. The Atari 130XE is selling for one-seventh of the price of the original Atari 800. The 130XE has twice the memory of the original Atari, it includes BASIC which was an extra charge when the original Atari was released, it has the clearest display of any Atari, and it features more graphic modes than any previous Atari computer.

So why aren't people standing in line to buy this amazing low-cost computer? I have a hard time figuring this one out myself. Why is it that just when the cost of computers are truly affordable and that the list of available software has grown to astounding numbers, people seem to be turning their back on computers? How is it that when there were only a few games available for home computers they sold well, and now that many powerful utilities for the home are available, most people consider home computers simple game machines?

I think there are many reasons for the decline in popularity of home computers. Most people are not technical. However, most people have learned the definition of certain key words. A little knowledge is often a dangerous thing. Frequently, consumers are misled by what they think they know. How many times have consumers purchased machines that were better suited for the office than the home only because they thought that a 16-bit computer was better than an 8-bit computer?

Many consumers will enter a world of computing that they can little afford by buying office machines for their home. For example, a complete Atari system costs about \$400. A full set of software for word processing, database and spreadsheet can be purchased for \$100. By contrast, an entry-level MS DOS system would cost about \$1,400 and the software could cost another \$1,000. And yet the Atari offers more educational and home-oriented software.

There has been a general failure of computer and software vendors to put computers to any useful purpose in the home. Originally computer manufacturers advertised that computers could help in the kitchen for storing recipes, and in the home office to manage the check book and home finances. In fact, a lot of the original computers soon became lifeless dwellers in attics and closets waiting to have a task assigned to them.

The Atari, however, had one significant advantage over other home computers, it was truly a fun computer. While many users found that spreadsheets were too difficult to learn, databases too inconvenient to use, and word processors slower than a typewriter, they were captivated by the truly outstanding games available for the Atari.

As arcade games fell from popularity, so did home computers. With the cost of VCR's dropping, more families purchased VCR's than computers for family entertainment. Rock video's became more popular visual entertainment than arcade games.

I think that this Christmas season, families should once again look at the home computer. The Atari 130XE is now a truly affordable home computer. There are uses for the home computer that make it an ideal addition to the home.

With the Atari's many graphic modes, the Atari makes for a very low-cost video titler. The Atari's sound capability makes it ideal for learning music fundamentals. The low cost of drawing tablets for the Atari make it ideal for creating artwork. Recent products from Broderbund and XLENT software allow the Atari to be used with dot matrix printers to create advertising layouts and camera-ready ads. The Atari can be used with low-cost modems to gain access to several online databases.

There are also many uses for low-cost computers in the office as well as in the home. With the Atari costing only \$150 for 128K of memory, individuals and companies should be aggressively looking for new dedicated uses for the Atari.

One company, Multiplex Technology Inc., uses Atari computers as dedicated controllers in the manufacture of their main product, video multiplexers. Mr. J. Crosby, VP of engineering claims that they have tried higher cost computers, but the Atari holds up well in the harsh environment of their plant.

Lee Smith of Ohio has designed a package that allows cable operators to use the Atari to do program announcements. He used the advanced graphics capabilities of the Atari to adapt an \$800.00 system to replace a \$10,000 dedicated device.

Tim Mitchell of Virginia has designed an engineering package, called "Ditch Pack", that performs calculations that normally takes an engineer four hours in just 90 seconds. "Ditch Pack" sold as a complete package, including the Atari 130XE, costs only \$600, yet it can save a civil engineer thousands of hours a year. Mr. Mitchell claims that the performance of his package would not increase if it were ported to more costly computers.

Many companies should consider putting the Atari and other low-cost computers to dedicated tasks. It is unfortunate that many companies are forgoing the advantages of computers because many managers believe that all tasks must be performed on computers that conform to a non-existing standard. Operating systems come and go. Technology always advances. It does not make sense to look for standards or look for compatibility if the operation that is being considered is a dedicated task.

Consider a company message board that would drive low-cost monitors. Messages could be distributed on inexpensive video cable to strategic locations in an office complex. If this location happened to be a mall, an elevator or some other public location, advertising could be sold on such a system. The Atari would work well for this application.

A real estate office could use the Atari to compute payments and produce hard copy for prospective buyers.

(Continued on Page 38)

Atari's Small Miracles

by Mark A. Brown

Welcome to the first installment of Atari's Small Miracles, a monthly column dedicated to the short Atari BASIC programs we all can type in and enjoy. One, two, five, up to ten lines of code can be put in this space, and you'll get four or five of these minute marvels every month! These small programs will range from the practical to the bizarre with everything in between; nothing is too strange, esoteric, or useless to miss the attention of this column; I'll cover them all!

This first month we'll start out with the bizarre: art on the computer. Since realistic scenes are difficult even without the ten line limit, abstract impressionism prevails here, or what most call modern art. I've decided on a few examples that show off our Atari computer's creative ability to the hilt.

PICASSO

PICASSO is the shortest program this month; a mere three lines. It's been around for a while, but it's still good. It draws different colored lines all over the screen changing while making the whole thing glow. The effect (minus the glowing colors) resembles something a famous abstract impressionist once did. It's a pretty impressive program for it's length.

```
10 GRAPHICS 23:B=0:FOR A=1 TO 2 STEP 0
 :B=B+1-16*(B=15):COLOR B:DRAWTO 159*RND(0),95*RND(0):SETCOLOR 0,B,4
 20 SETCOLOR 1,15-B,6:SETCOLOR 2,INT(16
 *RND(0)),8:IF RND(0)<0.99 THEN POKE 77
 ,0:NEXT A
 30 FOR A=1 TO 5000:NEXT A:RUN
```

DARTS

DARTS creates an image of little darts flying their way to freedom from the chaos of the center of the screen. Or maybe just a bunch of worms getting out of a traffic jam; I'll leave the interpretation up to you. It's in graphics mode 9, the GTIA multi-brightness mode, and the darts are made up of the 15 shades available going from very bright to almost invisible at opposite ends of the dart. They're placed randomly with random directions, but the end effect is usually similar to another RUN of the program.

```
10 GRAPHICS 9:FOR A=1 TO 10000:X=INT(4
 7*RND(0)+17):Y=INT(127*RND(0)+33):DX=I
 NT(3*RND(0)-1):DY=2*INT(3*RND(0)-1)
 20 IF DX=0 OR DY=0 THEN COLOR 0:PLOT X
 ,Y:FOR Z=1 TO 16:COLOR Z:X=X+DX:Y=Y+DY
 :DRAWTO X,Y:NEXT Z
 30 POKE 77,0:NEXT A:RUN
```

SUNBURST

SUNBURST draws a circle made up of criss-crossing lines, then draws another circle inside of it with smaller lines, a smaller circle inside of it, and so on, changing colors all the while. It's a slow circle, using the SIN and COS functions to figure out the coordinates, but perhaps its lack of speed can be considered part of its artistic value.

```
10 DEG :GRAPHICS 23:R=45:D=10:FOR A=1
 TO 7:FOR B=-90 TO 90 STEP 2*R/D:X=R*COS
 (B):Y=R*SIN(B):COLOR INT(4*RND(0)+1)
 20 PLOT 80+X,48+Y:DRAWTO 80+X,48-Y:COL
 OR INT(3*RND(0)+1):PLOT 80-X,48-Y:DRAW
 TO 80-X,48+Y:DRAWTO 80+X,48+Y
 30 POKE 708+INT(3*RND(0)),PEEK(53770):
 NEXT B:R=R-D:D=D-1:NEXT A
```

RIBBON

RIBBON creates a really weird image, and its title doesn't do justice to what it can look like. Again it's in graphics mode 9 but here it draws a ribbon down the screen reversing direction when it hits the bottom. The secret to its uniqueness is the formula for figuring out the color in the end of line 20; it's always dark at both ends of the ribbon and bright in the middle no matter how wide the ribbon is or where it is on the screen. For a different look change the GRAPHICS 9 statement to GRAPHICS 11, the GTIA many colored mode. To really appreciate it let the program run for a few minutes to get a 3-D effect.

```
10 GRAPHICS 9:X1=20:X2=60:Y=0:DY=1:GX=
 20:FOR L=1 TO 2 STEP 0:FX=INT(70*RND(0
 )+5):IF ABS(FX-GX)<30 THEN NEXT L
 20 FOR X=X1 TO X2 STEP SGN(X2-X1)+(X2-
 X1):C=ABS(X-X1)*(30/ABS(X2-X1+(X2-X1))
 ):IF C>15 THEN C=30-C
 30 COLOR C:PLOT X,Y:NEXT X:Y=Y+DY:DY=D
 Y*(Y<>0 AND Y<>191)+(-DY)*(Y=0 OR Y=19
 1):X1=X1+SGN(FX-X1):X2=X2+SGN(GX-X2)
 40 IF X1=FX THEN NEXT L
 50 IF X2=GX THEN GX=INT(70*RND(0)+5):I
 F ABS(GX-FX)<30 THEN GX=X2:GOTO 50
 60 POKE 77,0:GOTO 20
```

QUADART

And finally there's the only program with simulated motion this month, **QUADART**. Little flags are put on the screen facing different directions (depending on which quadrant they're in), then a short machine language subroutine rotates their colors so that it looks like the flags are moving towards the middle. Its not truly modern art but it is good to look at. Note that the machine language routine can be used for all types of color shifting in graphics mode 10, and if you find a good use

for it (in under ten lines) send it in and I'll see if it can be included in this column!

```

10 B=1:DIM A$(21):GRAPHICS 10:FOR A=0
TO 39:B=B+1:B=B*(B<>9)+(B=9):COLOR B:P
LOT A,0:DRAWTO A,191:NEXT A
20 FOR A=40 TO 79:B=B-1:B=B+B*(B<1):CO
LOR B:PLOT A,0:DRAWTO A,191:NEXT A:B=1
:FOR A=0 TO 94 STEP 2:B=B+1
30 B=B*(B<>9)+(B=9):COLOR B:PLOT 0,A:D
RAWTO 79,A:NEXT A:FOR A=95 TO 191 STEP
2:B=B-1:B=B+9*(B<1):COLOR B
40 PLOT 0,A:DRAWTO 79,A:NEXT A:FOR A=1
TO 7:POKE 704+A,A$18:NEXT A:FOR A=1 T
O 21:READ B:A$(A,A)=CHR$(B):NEXT A
50 A=USR(ADR(A$)):FOR A=1 TO 9:NEXT A:
GOTO 50:DATA 104,174,200,2,160,6,185,1
93,2,200,153,193,2,136,136
60 DATA 16,245,142,193,2,96

```

And on that subject, I'd like to say that there is no way I can write four or five programs each month on a

regular basis without running out of ideas and making one program be just a minor variation of another, so I'm asking for your help. Send me your tired, your poor, your programs you've accumulated over the years. The kind collecting the proverbial dust on disk number eighty or ninety something. As I said before, nothing is too far out and if the program is good enough (and short enough) you'll get your name in this column and all the money I make from doing this! Upload them to Armodic (703-569-8305) and send mail to me (my name on the board is "E.L.F.") telling me the title and what it does. If you don't have a modem or its a long distance call for you, print out the program and send it to: Atari's Small Miracles, c/o Mark A. Brown, 7097 Game Lord Drive, Springfield, VA 22153

The rules of the game are that the program has to be ten lines of BASIC code or less (machine language can fit into DATA statements like QUADART's) and it must be fairly easy to type in: no ten lines of hexadecimal data that makes one want to acquire a fasionable jacket with six foot wraparound sleeves. I'll take Action! programs as well, but since there are no true "lines" in Action! you must keep the program in 380 characters; ten lines of 38 characters each line. I've got an open mind, so try anything. See you next month!

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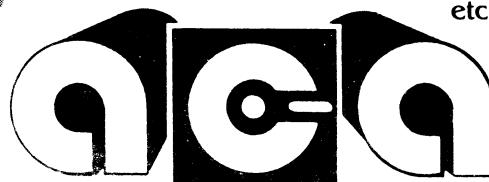
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Learning Through LOGO

by Susan Wolff

Components of a Well-Balanced Computer Program

Although in the two previous issues I have been discussing LOGO and its applications in the classroom, there are many components of a complete computer program in the schools: a) history of computers, b) parts of a computer, c) how computers work, d) software, and e) a programming language.

History. You would be surprised, if you haven't been in a classroom lately, how many children when questioned about where computers came from, would respond, "Sears".

It isn't that children need to memorize dates or technical aspects of the computer revolution, but they should be given a sense of the developmental progression of automatic calculating devices over the centuries. They should get a feel for the idea that technology advanced as needs changed in the world and life got more complicated. Children should know that computers didn't just come out of a box, but rather are the result of other kinds of revolutions that occurred over the centuries. The development of the computer should be put into the perspective of other political, industrial, and social changes that went on in the world. And children need to use this historical perspective to think about the future and all the possible implications of this age of technology.

Parts. I believe that young people are capable of being comfortable with the vocabulary of today's technology. Not so that they can be tested on spelling or definitions, but so that they can carry on intelligent conversation about something very commonplace in today's world. I cringe when I hear a small child say, "Do I turn this thing on first?", or "Is this watchamacallit plugged in?". Using words like monitor, disk drive, or even central processing unit should be as natural to children as saying microwave or videotape. How are you going to be in control of a "dohickey" if you don't even know its name? Children can learn what all the parts of a computer are and what goes on in each part. I'm not suggesting that this learning include technology that is beyond the child's interest or ability to comprehend, but even very young children can at least use the correct vocabulary.

How They Work. Learning about how computers work is really tied to the parts of the computer. I will say again that teachers do not need to get too technical with the children, but certainly should encourage curiosity about what is going on inside the computer. A lesson on the binary number system can teach the children a lot about our own base ten system.

As a comparison, just as it is true that a child does not need to know what makes a ten-speed bicycle operate the way it does in order to utilize it, when that new bike

arrives it is a wonderful opportunity for the whole family to find out about gear ratios.

Teachers do not need to get degrees in computer science to satisfy their class's curiosity about computers, but certainly the time when the class begins to use the computers again in the fall is a wonderful time for finding out what is going on inside the computer. There are many well done resources available for school libraries that would help even the youngest users get the general idea.

Software. Part of a well-rounded computer program would also have to include a variety of good educational software. I emphasize GOOD. I would rather see a school invest in a few pieces of quality software that are chosen with care, than go out and buy many mediocre programs. Today's software can provide children with a variety of problem-solving experience. I would also put, at the top of the list, an easy to use word-processing program.

Language. Last, but certainly not least, I would include a programming language, my first choice, of course, being LOGO. My reasons for choosing LOGO were enumerated in last month's article.

So ask your children what they have been doing with the computers in school. Volunteer an hour of your time and go into your child's classroom and share what you have been doing with computers. Make sure your children have been getting a well-rounded computer experience. If you don't have children you're welcome to come teach something to my classroom!

Although it is early in the year, I thought I would share with you the first program written by three of my fifth graders this week. They are just beginning to use LOGO, but this program will illustrate how they have started to use LOGO to integrate computers into our social studies program:

[NOTE: in the listing below, boldface characters represent inverse video on the ATARI. Ed.]

```

TO ENDING
TS CT
SETCURSOR [14 10]
PR [THE END]
END

TO PIC1
HT
FD 40 LT 90 FD 30 RT 30 FD 50 RT 90 FD 10 RT 90
FD 40 LT 90 FD 10 LT 90 FD 60 RT 90 FD 15 RT 90
FD 60 LT 90 FD 10 LT 90 FD 20 RT 90 FD 10 RT 90
FD 30 RT 90 FD 10 LT 90 FD 40
PR [THIS IS A PICTURE OF A CACTUS.]
WAIT 200
END

```

TO PAGE3	PR [NORTH AMERICAN DESERTS]	PR []
TS CT	END	PR [PRESS RETURN TO CONTINUE.]
REPEAT 1 [PR[]]		PR RL
PR [THERE ARE LOTS OF DIFFERENT PLANTS IN THE DESERT, SUCH AS CACTUSES.	TO DESERT	END
THERE ARE ALSO LOTS OF WEEDS.]	TITLE	
PR []	CREDIT	TO PAGE2
PR [PRESS RETURN TO CONTINUE.]	PAGE1	TS CT
PR RL	PAGE2	REPEAT 4 [PR []]
END	PAGE3	PR [WHERE DESERTS ARE FOUND]
TO CREDIT	PIC1	PR []
REPEAT 3 [PR[]]	ENDING	PR [DESERTS CAN BE FOUND IN MANY
PRINT [JASON, JENNIFER, MELISSA]	END	STATES. SUCH AS: NEW MEXICO, ARIZONA,
PR []	TO PAGE1	UTAH, NEVADA, CALIFORNIA, AND PARTS OF
PR [PRESS RETURN TO CONTINUE]	TS CT	OREGON.]
PR RL	REPEAT 4 [PR []]	PR []
END	PR [NORTH AMERICAN DESERT]	PR [PRESS RETURN TO CONTINUE.]
TO TITLE	PR []	PR RO
TS CT	PR [NORTH AMERICAN DESERTS ARE VERY	END
REPEAT 9 [PRINT []]	DRY. WHEN YOU THINK OF DESERTS YOU	
	THINK OF CACTUSES. DESERTS ARE VERY	
	HOT MOST OF THE TIME.]	

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CD Report

by George Langworthy

**Compact Disk Memory --
System Design**

This is the third in a series of articles on the exciting new optical disc memory, CD-ROM. The Compact Disc player and media were developed to replace the high fidelity vinyl record and cassette tape. When used to store text, each CD can store 550 million bytes. The music you hear is actually digital records of 2,048 bytes each, with status, clocking and error correcting bits added. Over 6 billion bits of information in the form of micron sized laser spots are on each \$12 CD disc.

Maybe one of you loyal readers has wondered if I failed first grade spelling. A Compact Disc is spelled *disc* because of it's predecessor the vinyl record disc. The computer industry magnetic disk is *disk*. Don't fret if you err. I'm sure I do.

Although relatively few of you will be involved in specifying or designing optical disc memory systems, I hope a brief description of system hardware, software and design concepts is of interest.

Input Hardware and Software

Document Scanning. Now that we can store all this information in just one CD-ROM, how does someone get all this information from paper to electronic form? A number of manufacturers offer document scanners that have resolutions of 200-300 dots per inch (dpi). Some well known names are Ricoh, Canon, Toshiba and Sharp.

Using well developed optical character recognition algorithms, a computer combined with a scanner can convert the letters on paper to ASCII codes. For graphics and photos the images could be stored in their direct digital form, or compressed.

A very interesting first generation digital optical scanner/copier is the Canon NP9030 laser copier system. It digitises the image at 400 dpi, and then can change it in a variety of ways. In 1986, a standard electronic interface will be attached to the scanner and copier components. Digitised images can be transmitted to and from the copier by computer. Digitised information from the computer can be printed. Images can be stored on magnetic disk by the computer. This could be very useful for low cost publishing.

Data Compression - Text. Even though the capacity of the CD-ROM is huge, there are data bases commonly in use that require more than one. All the USA phone books would be one example.

When searching entire texts of materials on CD-ROM, an inverted index will be a common access method. All words in the data to be placed on disc would be sorted with electronic pointers attached. Each pointer shows

which of the 270,000 "pages" of 2,040 bytes contains that word. Instead of representing each word in the text as letters, it could be represented by a binary number. The number shows the word's position in the word list. For example, aardvark might be word number 4, represented by a binary 4. A 20-bit binary word represents up to 1,048,000 individual dictionary words. This is 2 1/2 bytes. There are a number of other text compression methods available.

Data Compression - Graphics and Photos. The International Telegraph and Telephone Consultative Committee (CCITT), an international communications protocol standards organization, has developed graphics and photograph compression/expansion standards for facsimile copiers. The current Group 3 standards allow up to a 50/1 reduction in the amount of storage and of data transmission time it takes for any given image. The more complex the image, the less it can be compressed.

This is important to the CD-ROM producer and user as one 8 1/2x11" page digitised at 300 dpi takes 8,000,000 bits, or 1,000,000 bytes. Color images would take up to 4x this for black plus three colors, without some form of compression. American Micro Devices, a USA VLSI chip manufacturer, recently introduced the Am7970, a controller, compression and expansion chip for use in facsimile machines. It implements the key portions of the Group 3 standards. More advanced Group 4 standards are under development covering higher 240-400 dpi resolutions and up to 64 kilobyte/second transmission speeds.

Information Storage on CD-ROM

MULTIPLE CD PLAYER CHANGERS by Denon and Technics hold 100 and 51 discs respectively. As larger and larger databases of more varied types of information become available, these multiple CD player/changers will become very important. They will allow automated reference libraries, ones which could be accessed from your home computer, teletypewriter or TV/computer system.

What will happen to all the reference librarians? Instead of looking up information for you, or pointing out where to find it in the stacks, they will become search procedure instructors. For common information, you will have your own CD-ROM reader/computer/printer if you're a serious student or computer person. What you locate at the library will be more specialized or costly private database information.

Desktop Publishing

Desktop publishing is a new buzzword and venture capital darling industry. The types of printers needed for typical personal or reference library CD-ROM installations have similar characteristics to those appropriate for desktop publishing.

CD-ROM requires a page printer with purchase and operating costs comparable to those of plain paper copiers, a low noise level, output of several pages per minute, ability to print text, graphics and photographs,

ity to print text, graphics and photographs, and use of plain paper. Ink jet, laser, liquid crystal shutter, and light emitting diode are the most important types available now and through 1986. Speeds of 8-12 pages per minute are provided by laser and other printers for under \$7,000 in October 1985.

The Canon LPC-CX printer "engine" or central printing mechanism, allowed costs for the least expensive laser printer to be reduced from over \$20,000 to a mail order price of under \$2,600 today. This resulted from the high volume production of the Canon PC-10/20/25 personal copier that uses the same "engine."

Laser printers have three levels of price and capabilities. The lowest is daisy wheel emulation, usually Diablo 630. The next provides limited graphics and EPSON FX, MX, etc. emulation. The most sophisticated is the full graphics printer such as the Apple LaserWriter at \$7,000 list.

A technology that holds promise of lower costs because it has no precision spinning mirror is the liquid crystal shutter printer. The Casio LCS 2400 is the first announced of its type. It is available to OEMs now and will be produced in quantity in 1986.

Other technologies not as far along are light emitting diode, magnetic flux, ion deposition, and electro-erosive.

Page Description Languages. Adobe Systems, Palo Alto, California, has developed what is called a page

description language. PostScript allows full bit mapped graphics printers such as the Apple LaserWriter to handle various type fonts, graphics, page composition and other aspects of preparing unadorned text for publication. Several other companies have products serving a similar function.

Page description languages offer the CD-ROM publisher the ability to make the retrieved document look like a book or magazine page, rather than a nice looking computer printout all done in one type style and size. Photos and graphics can be integrated with text in some of these personal computer software systems. Just as with the personal computer, the total system cost for an equivalent function, in house or local publishing, is reduced by 80-90 percent. Professional dedicated computer based publishing and typesetting systems cost \$50,000 - \$100,000 and more.

Late News re Atari CD-ROM

As of October 16 no further word has been heard regarding production or release of the Atari CD-ROM. One source indicated that the player/drive would be able to "play" audio CD's. The Atari CD-ROM dual purpose player/drive would widen the market considerably for both computer systems and CD-ROM data storage applications. The audiophile could help justify purchase of the Atari 520ST computer because it could play music on the CD-ROM player and the MIDI interfaces. The computernick could say I'll get a CD-ROM disc drive because, even though there isn't much published information I want yet, I can use it for my first, second or third audio CD player.

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Action! Action

By Jon Smith

This month's installment of Action! Action will mark the column's first full length Action program. The program, *Rhythm Maker*, is a music program that allows you to create complex rhythms up to thirty-two beats long. *Rhythm Maker* is actually a computerized "drum machine." Below are brief instructions for using *Rhythm Maker*. Next month, we'll take a much closer look at the program and its uses.

To use *Rhythm Maker*, first type in the program listing and write it to disk. Then compile and run the program.

When run, you will see a display with four "tracks." The tracks are labelled: Bass Drum, Snare Drum, Bongos, and Electronic drums. You will also see lines for tempo, stop/repeat point(to be explained later), and for saving and loading your rhythms.

To move between lines, use the up arrow ("") and the down arrow ("="). The selected line will appear in inverse.

Pressing the "T" key while a track is selected will enter the Type entry mode of *Rhythm Maker*. If nothing happens, make sure you aren't in lower case or inverse mode. After pressing "T", you can move across the track by using the right and left arrow keys ("*" and "+"). Pressing the numbers "1" through "5" will cause the appropriate number to be printed on the screen under the cursor. Pressing the space bar will erase whatever is under the cursor. The only other key that has any effect is the RETURN key, which exits the type entry mode.

The numbers you can enter ("1" through "5") represent the five different types of drums on that track. The higher the number, the higher pitched the drum sound. For example, a "5" on the second track would represent a high pitched snare drum, or a 1 on the first track would signify a low bass drum.

Now exit the type entry mode through the use of the RETURN key. Press "V" to enter the volume entry mode. You probably noticed that every time you entered a number in the type entry mode, an "A" appeared under the number. That was the default volume, 10. Volume is in hexadecimal - "1" for softest, and "F" for loudest. Operate volume entry mode just like type entry mode, except you can enter 1 through 9 and A through F instead of just "1" through "5".

Pressing START will cause your rhythm to begin playing. All four tracks are played simultaneously. Pressing START again will stop the rhythm.

When a rhythm is playing, a small dot moves along several horizontal lines on the screen. This dot represents the beat the computer is currently on. Whenever this dot reaches a small verticle mark (the stop/repeat point) on the line, it returns to the beginning. The

stop/repeat point can be changed by moving to the stop/repeat point line and pressing the right and left arrow keys ("*" and "+"). This moves the point along the line in the appropriate direction. The tempo can also be changed by using the right and left arrow keys. The higher the tempo, the faster the rhythm is played.

Pressing the "S" and "L" keys on the Save/Load line prompts you for a filename and allows you to save and load your creations.

Pressing the "S" key while a track is selected will toggle the select status of that track. If a track is selected, a small right arrow will appear on the left of the track. When playing the rhythm, only the selected tracks will be played.

Pressing SHIFT CLEAR will clear your rhythm from the computer's memory.

Listed below is a sample rhythm. Type this rhythm in as an example of *Rhythm Maker*'s potential. (NOTE: in the figure below, I have printed a period "." to represent a blank space. This is only to help you reproduce the rhythm. When you try entering this sample, press the space bar for every period you see.)

RHYTHM-MAKER	by Jon Smith
Tempo: 245	START = Start/Stop
Stop/Repeat Point	
Track 1: Bass Drum	
-> typ:1.....1.1.....1.....1.1.....	vol:F.....F.F.....F.....F.F.....
Track 2: Snare Drum	
-> typ:....5..5....3.....5.5....3.33.	vol:....A..A....A.....A.A....A.44.
Track 3: Bongos	
-> typ:.....11.....11.....	vol:.....77.....77.....
Track 4: Electronic	
-> typ:.....	vol:.....
Save/Load	

If you have any questions regarding this program or Action in general, call me at (703)437-8652.

```
;;
; RHYTHM MAKER
;;
;;
; by Jon Smith
; for Current Notes
; November 1985
;;
```

```
BYTE repeat=[3],tempo=[240]
BYTE ARRAY typ(130),volume(130),
      select(4), lines=[1 3 5 9 13 17 21]
CARD realerror
```

```

PROC InverseLine(BYTE line)
CARD savmsc=$58,addr,i
BYTE x
IF line<0 OR line>23 THEN RETURN FI
addr=savmsc+(line*40)
FOR i=addr TO addr+39 DO
  x=Peek(i) x+=+$80 Poke(i,x)
OD
RETURN

PROC Show_Repeat(BYTE mark)
Position(7+repeat,4) Put(mark)
Position(7+repeat,8) Put(mark)
Position(7+repeat,12) Put(mark)
Position(7+repeat,16) Put(mark)
Position(7+repeat,20) Put(mark)
RETURN

PROC Line40()
Print("____")
RETURN

PROC Screen_Setup()
SetColor(2,0,0) Poke(82,0) Poke(752,1)
Print("MRHYTHM-MAKER" by
Jon Smith")
Print(" Tempo: ") PrintB(tempo) Positi
on(22,1) Print("START = Start/Stop")
Line40()
PrintE(" Stop/Repeat Point")
Line40()
PrintE(" Track 1: Bass Drum")
PrintE("E typ:")
PrintE(" vol:")
Line40()
PrintE(" Track 2: Snare Drum")
PrintE("E typ:")
PrintE(" vol:")
Line40()
PrintE(" Track 3: Bongos")
PrintE("E typ:")
PrintE(" vol:")
Line40()
PrintE(" Track 4: Electronic")
PrintE("E typ:")
PrintE(" vol:")
Line40()
PrintE(" Save/Load")
Line40()
RETURN

PROC Clear_All()
BYTE i
repeat=3 Show_Repeat('+')
FOR i=0 TO 3 DO select(i)=1 OD
FOR i=0 TO 128 DO volume(i)=0 typ(i)=2
55 OD
RETURN

```

```

PROC AdjustVol(BYTE line)
BYTE pos,x,y,n,c
pos=0 y=lines(line) Poke(752,0)
DO
  Position(7+pos,y+2) Print("=<")
  x=GetD(1)
  IF x='*' THEN pos==+1
  IF pos=32 THEN pos=0 FI FI
  IF x='+' THEN pos==+1
  IF pos=255 THEN pos=31 FI FI
  IF (x)>'8 AND x<='9' OR
    (x)='A AND x<='F' OR
    x=32 THEN Put(x)
  IF x>'8 AND x<='9' THEN n=x-'8' FI
  IF x=32 THEN n=0 FI
  IF x='A AND x<='F'
    THEN n=(x-'A)+10 FI
  c=line-2 volume((c*32)+pos)=n
  pos==+1
  IF pos=32 THEN pos=0 FI
FI
IF x=155 THEN EXIT FI
OD
Poke(752,1)
RETURN

PROC AdjustTyp(BYTE line)
BYTE pos,x,y,n,c
pos=0 y=lines(line) Poke(752,0)
DO
  Position(7+pos,y+1)
  Print("=<") x=GetD(1)
  IF x='*' THEN pos==+1
  IF pos=32 THEN pos=0 FI FI
  IF x='+' THEN pos==+1
  IF pos>200 THEN pos=31 FI FI
  IF (x)>'8 AND x<='5' OR x=32
    THEN Put(x)
  IF x>'8 AND x<='5' THEN n=x-'1' FI
  IF x=32 THEN Print("=< ")
    n=255 FI
  c=line-2 typ((c*32)+pos)=n
  IF x=32
    THEN volume((c*32)+pos)=0 FI
  IF n>255 AND volume((c*32)+pos)=0
    THEN volume((c*32)+pos)=10
    Print("=< ")
  pos==+1 IF pos=32 THEN pos=0 FI
FI
IF x=155 THEN EXIT FI
OD
Poke(752,1)
RETURN

```

```

PROC Show_Data()
BYTE j,i,x
FOR j=0 TO 3 DO
  Position(7,lines(j+2)+1)
  FOR i=0 TO 31 DO
    x=typ((j*32)+i)
    IF x=255 THEN Put(32)
    ELSE Put(x+'1') FI
  OD
  Position(7,lines(j+2)+2)
  FOR i=0 TO 31 DO
    x=volume((j*32)+i)
    IF x=0 THEN Put(32)
    ELSEIF x>9 THEN Put(x+'7')
    ELSE Put(x+'0')
  FI
  OD
RETURN

PROC FakeEdit()
RETURN

PROC MyError(BYTE errnum)
BYTE x
CARD n
Poke(867,0)
Poke(752,1)
Position(2,21) Print("I/O Error #"
PrintB(errnum)
Print(" ")
FOR n=1 TO 5000 DO
  Sound(0,255,10,15) OD
  SndRst() x=GetD(1) Error=realerror
  Position(0,21)
  Print(" Save/Load
")
; (29 spaces after Load above)
  SndRst() FakeEdit()
RETURN

PROC Save()
BYTE i,x
CHAR ARRAY filename(16)
realerror=Error Error=MyError
Close(2) Position(0,21)
Print(" ")
Position(2,21)
Print("Save Filename -> ")
InputS(filename)
Open(2,filename,8,0)
FOR i=0 TO 128 DO
  x=typ(i) PutD(2,x)
  x=volume(i) PutD(2,x)
OD
PutD(2,tempo) PutD(2,repeat)
Close(2)
Position(2,21)
Print("Save/Load
")
Error=realerror
RETURN

```

```

PROC Load()
BYTE i,x
CHAR ARRAY filename(16)
realerror=Error
Error=MyError
Close(2)
Position(0,21)
Print(" ")
Position(2,21)
Print("Load Filename -> ")
Input$(filename)
Open(2,filename,4,0)
FOR i=0 TO 128 DO
  x=GetD(2)      typ(i)=x
  x=GetD(2)      volume(i)=x
OD
tempo=GetD(2) repeat=GetD(2)
Close(2)
Screen_SetUp() Show_Repeat('+')
Show_Data()
Error=realerror SndRst()
RETURN

```



```

PROC Play()
BYTE ARRAY vvol=[0 0 0 0],
  vfreq=[0 0 0 0],
  vdis=[0 0 10 10],
  basstypes=[250 225 200 175 150],
  snaretypes=[50 40 30 20 10],
  bongotypes=[250 235 225 200 160],
  electypes=[230 200 150 100 50]
BYTE count,c,j
CARD time,i

FOR i=0 TO 3 DO vvol(i)=0 OD
count=0 time=repeat repeat=0
Show_Repeat('0') repeat=time
DO
  FOR i=0 TO 3 DO
    c=(i*32)+count
    IF typ(c)<>255 THEN
      IF i=0 THEN
        vfreq(0)=basstypes(typ(c))
        vvol(0)=volume(c)
      ELSEIF i=1 THEN
        vfreq(1)=snaretypes(typ(c))
        vvol(1)=volume(c)
      ELSEIF i=2 THEN
        vfreq(2)=bongotypes(typ(c))
        vvol(2)=volume(c)
      ELSEIF i=3 THEN
        vfreq(3)=electypes(typ(c))
        vvol(3)=volume(c)
      FI
    FI
  OD

```

```

FOR j=1 TO (255-tempo)/2 DO
  FOR i=0 TO 3 DO
    IF select(i) THEN
      Sound(i,vfreq(i),vdis(i),vvol(i))
    FI
  OD
  FOR time=1 TO 1000 DO OD
    vvol(0)==-3 IF vvol(0)>200 THEN
      vvol(0)=0 FI
    vvol(1)==-1 IF vvol(1)=255 THEN
      vvol(1)=0 FI
    vvol(2)==-1 IF vvol(2)>200 THEN
      vvol(2)=0 FI
    vfreq(3)==+5 IF vfreq(3)<10 THEN
      vfreq(3)=1 vvol(3)=0
    FI
  OD
  time=repeat repeat=count
  Show_Repeat('-) repeat=time
  count==+1
  IF count>repeat THEN
    count=0 Show_Repeat('+) FI
  repeat=count Show_Repeat('0)
  repeat=time
  IF Peek(53279)=6 THEN
    DO UNTIL Peek(53279)=7 OD
    repeat=count Show_Repeat('-)
    repeat=time
    IF repeat=count THEN
      Show_Repeat('+) FI
    EXIT
  FI
  OD
  SndRst()
RETURN

```

```

PROC Edit()
BYTE line=0, ch=764, consol=53279, x,k
InverseLine(lines(line))
Close(1) Open(1,"K:",4,0)
DO ch=255
  DO IF consol=6 THEN
    InverseLine(lines(line))
    DO UNTIL consol=7 OD
    RETURN
  FI
  UNTIL ch<>255 OD
k=GetD(1)
IF k='-' THEN
  InverseLine(lines(line))
  line==+1 IF line=7 THEN line=0 FI
  InverseLine(lines(line))
ELSEIF k='+' THEN
  InverseLine(lines(line))
  line==+1
  IF line=255 THEN line=6 FI
  InverseLine(lines(line))
FI
InverseLine(lines(line))
Position(0,lines(line))
Print("2P")
IF k='K THEN Screen_SetUp()
  Clear_All() tempo=240 FI
IF line=0 THEN
  IF k='*' THEN tempo==+1 FI
  IF k='+' THEN tempo==+1 FI
  Position(9,1) Print$(tempo)
  Print(" ")
ELSEIF line=1 THEN
  IF k='*' THEN Show_Repeat('-)
  repeat==+1
  IF repeat=32 THEN repeat=0 FI
  FI
  IF k='+' THEN Show_Repeat('-)
  repeat==+1
  IF repeat=255 THEN repeat=31 FI
  FI
  Show_Repeat('+)
ELSEIF line=6 THEN
  IF k='S THEN Save() FI
  IF k='L THEN Load() FI
ELSEIF line>1 AND line<6 THEN x=k
  IF x='U THEN AdjustVol(line) FI
  IF x='T THEN AdjustTyp(line) FI
  IF x='S THEN
    IF Select(line-2)=1 THEN
      Select(line-2)=0
      Position(0,lines(line)+1)
      Print(" ")
    ELSE Select(line-2)=1
      Position(0,lines(line)+1)
      Print("E+")
    FI
  FI
  Position(0,lines(line)) Print(" ")
  InverseLine(lines(line))
OD
RETURN

```

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LETTER PERFECT - A Review

by Lily Kelly

In the early days when we were newly introduced to computers, we were in the market for a word processing program to be used on our Atari 800. After some research, we saw a review of Letter Perfect from LJK Enterprises, Inc. and decided it was the one most suitable to our needs - my husband does a great deal of writing and since he did not type in those days, it befall upon me to do the typing... and choosing the "right" word processor. Little did I know what I was in for!

I opened the package, read the dire warnings, dutifully filled and signed the Program Registration Form and mailed it to LJK Enterprises (it said on the form to mail "within 10 days of purchase" - I feared what would happen if it arrived late). Then I set myself to trying to make sense of the extremely detailed six sectioned "leather-bound" manual. In those days, I wasn't even quite sure of the difference between "hardware" and "software", and what was a "Buffer" anyway? Definitely not something to do with chemistry classes! Help!

Someone suggested getting something a little simpler - yet not as powerful - Atariwriter. It worked fine. The important thing was that it came with a little manual and what I didn't understand I could always ask the person who recommended it. So how come I am reviewing Letter Perfect? Actually, I am reviewing Letter Perfect Version 6.5 which is a revised version sent for later on (thanks to that Program Registration Form which gave us backup privileges and future updates at reasonable cost). It came with a new manual, very well laid out, easy to understand and an excellent tutorial to get me started. Of course, this increased understanding may have something to do with having learnt some computerese. We have been using it ever since.

Letter Perfect can be used on any Atari computer with a minimum of 32K memory, preferably with an 80-column board, which we have and is only available for the 800. One of the best features is that it can be configured to work with almost any printer. The program is un-protected, and a backup copy can be made directly from the Main Menu. The manual begins with a Vocabulary and Symbols Table which is a big plus for those who are new to computing, the different sections are clearly laid out and comes with a quick reference card that has the control codes listed both alphabetically and grouped by function. With Letter Perfect, you have the capability of merging text files with database files from another system (Data Perfect) and it comes with a spelling checker program. (My husband uses it 'cause he doesn't trust my spelling.)

To configure the program (necessary when you first start out or want to change system), all you have to do is load and hold down the ESC key while the disk is booting. The first menu lets you determine how LP will appear on your screen (set it for 40 or 80 column); second menu sets your disk drive defaults and density; the third menu permits selection of the printer file to be used with your system. There are 9 printer files on the Program Disk with pre-set values for characters, functions, and spac-

ings for each. And if your printer is not among the 9, or if you would like to set up special controlling characters for your printer, you can find detailed instructions in the Appendix section in the manual. Letter Perfect permits the widest possible range of appearances and text styles on your printer. Configuring the printer files is probably the most satisfying part of Letter Perfect to me. It appeals to my sense of creativity because it is possible to configure a printer file to do just about any style and size of print, margins, special characters, etc. Also, individual work sheets for each of the 9 printers files are provided. When the printer file has been selected, all the configured information is saved to the disk; or if you set up a new printer file for your system, you will have to name it before saving it as the 10th or more printer file on the Program Disk. This will be the printer file you will use and, until you reconfigure the program, will always be entered automatically when loading Letter Perfect.

If you have a one drive system, remove the Program Disk after the Main Menu comes on and insert a data disk in the drive. The data disk must be Letter Perfect formatted (not with Atari DOS). This can be done by pressing F (for the File command) and using the Format function within the File menu. To return to the Main Menu, press M.

Main Menu: There are 8 commands in the Main Menu that can be selected by either typing the first letter of the command listed or by moving the cursor using the < or > keys to the desired command followed by pressing [Return]. For example, the first of the eight commands is to Load a file. If a file is already on the data disk, type L or move the < or > key to Load, press [Return]. The remaining seven commands will now be discussed.

Edit Command - lets you enter the Editor, the main work area of the Word Processor. After pressing E, you will see a blank screen with a line on top identifying Letter Perfect and showing the number of characters you can enter in the Editor (free RAM). Letter perfect currently provides the most free RAM/work space of all the word processors - approximately 28,700K. Typing can be done either in overwrite or insert modes just by toggling Control and I simultaneously. The text entered is word-wrapped on the screen (default setting). You can also change the number of characters per line on the screen. This is super for typing tables or columns using tabs, especially if you have 80 column screen capability as you will then be able to see exactly how the table columns appear when the text is printed.

With different control commands, the cursor can be moved forward and backward by character, by word, by page, by paragraph, by block, by line, to beginning or end of any line, to the beginning or end of the text. This versatility in cursor movement makes for speedy editing and illustrates the power of Letter Perfect. Ease of deletions is also an advantage. Possibilities are - deleting character left or right, word left and right, each video line, line from cursor, or by large blocks of text. I found that cursor movement by character is somewhat slow in 80-column mode but, considering the myriad other possi-

ble movements available, one hardly need move or delete by single characters.

The Cut and Paste function is also easily accomplished. This involves putting a marker (control D) called Delimiter at the end of the passage you wish moved or duplicated, move the cursor to the beginning of the passage, control M automatically stores the whole passage to the buffer, which supposedly holds approximately 17 screen pages of text (amazing! I have yet to put it to the test). Put the cursor where the passage is to be inserted, then you have a choice of either copying from the buffer by pressing control 9 (which does not clear the buffer) or by pressing control 8 which also clears the buffer. If you have a paragraph which needs to be repeated in the text, you can keep copying from the buffer as many times as needed. A variation on the theme of movement is search-and-replace. Letter Perfect permits conditional or global replacement.

So far I have only covered movement in the Editor. Letter Perfect also lets you adjust the appearance of your printed text by various printer commands that can be viewed on the screen but will not show on the printed text. A few of these are described below:

Control F is an inverse "F" on the screen. This presents the Format line that makes it possible to control all the margins, spacing, type-style (fonts) and you can even make comments on the file that will not appear when printed out. You can enter as many of the format commands as you wish on one line, press [Return] when done. This is where you specify whether you wish to block the right margin (justify); indent a block of text a specific number of spaces from both margins or create negative indent effect, i.e., the first line of a paragraph is even with both margins, but all subsequent lines in that paragraph are indented a specific number of spaces at the left margin. This feature is useful for numbered items (i.e. bullet format which I use frequently). A "Stop Printer" command in a Format line, combined with a special printer character placed in the text where the printing is to stop, allows you to use single sheets of paper in your printer instead of the continuous-feed paper. Page numbering can begin with page one or any specified page number (necessary when linking files). Header, footer and page numbering go on the same line and may be on the left margin, centered, blocked to the right margin, and even blocked along the right margin on odd-numbered pages and along the left margin on even-numbered pages. (Let me catch my breath).

Control B turns on the Boldface toggle. An inverse B will appear. Depending on how you configured your printer file, this may print proportional type, emphasized print, or any special font your printer is capable of producing.

Control U turns on the underline toggle and will remain in effect until it is turned off with another control U or a forced carriage return is entered.

There are printer commands to center text (control C), block right, force end of page, conditional page break, superscript/subscript, and you can even embed CHR\$

function codes (commonly called control codes) in your text to access special printer features or enable your printer to print special characters not configured in the printer driver. The possibilities are only limited by the capability of your printer.

Dictionary Command - it comes with the program. Select D from the Main Menu and the Dictionary will commence operation. First, it will read the total number of words for the text currently in memory and simultaneously count the number of unique words. Interestingly, in the normal text about 40% of the total words will be unique. (We humans do repeat ourselves). Next, the Dictionary will be searched and those unlisted words (either misspelled, proper nouns, gerunds, etc.) will be highlighted individually. As each word is presented, you can Ignore (leave it alone), Match (show a list of words that sound similar), Change, or Quit (stop the spelling check) - just type the first letter of the option.

The Dictionary function is a very neat addition to Letter Perfect and it costs nothing extra. In essence, it is a hidden value of the program. The only drawback is that you cannot add words to the Dictionary. However, if you wish to have this capability - build your own additional dictionary, LJK sells a spelling checker program that permits this plus more functions (delete words, etc.) It's cost is \$30 or less.

Save Command - saves the contents of the file in memory to the disk. After S is pressed, a directory of the existing files on the disk will appear automatically on the screen. Type file name of not more than 8 characters, then press Return. Since LP does not double check the names on the directory, be careful when naming a new file or else it will overwrite an existing file. You can avoid this by locking currently unused files. Press ESC to return to the Main Menu.

File Command - enables you to lock, unlock, delete individual files on a disk; format a new disk, make a copy of any formatted disk; or tack on a file to the end of the file that is currently in the Editor, memory permitting.... Pressing M will return you to the Main Menu.

Print Command - controls all output of your document, either on screen or paper. After you select P for Print from the Main Menu, a second menu will appear with four new commands. Choosing the Screen command allows you to check the appearance of the file before printing it. You can control the scrolling speed (toggle < or >) or stop/start it (space bar). Pressing the ESC key will abort and return you again to the Print menu. The print options are clearly illustrated in the manual. Whether you print a file on screen or on paper, you can specify the number of copies and range of pages to be printed, i.e. one or multiple copies of the entire text; one or a specific number of a particular page or several consecutive pages anywhere in the text. If only 1 copy of the entire text is required, all you have to do is press the Return key. When the file is printed, you will be shown a directory of the disk in the drive allowing you to chain another file to the original with no break in page num-

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**MUDPIES -
An Arcade Special for the ST
Reviewed by Frank Sommers**

[MichTron, Inc. 567 S. Telegraph, Pontiac, Michigan 48053
(313) 334-5700 \$29.95]

MUDPIES, like many of the addicting arcade games, hopes to generate a psychic rush by playing on "everyman's" dream/nightmare of being chased to his or her destiny. LODERUNNER, for example, with its quartet of little men, is ever after you. As in many games, coupled with the hounding, pounding thing behind you, there is the perpetual fear of time, the ticking of the clock. In MUDPIES the double threat is the twirling, whirling miniature clowns who dash to touch and fell you, or zonk you with one of their juggling pins, unexpectedly popping up and heading straight at you.

Your defense is to dodge, dart, seize small colored mudpies and by pointing with your body and pressing the trigger, whirl the pie and knock any clown in your line of fire right out of the circus ring. In fact, one of the better effects, is to watch two or three clowns all scuttled off the screen in a heap as though hit by a bowling ball.

Once the ring is cleared? From every entrance a new hoard of scurrying figures pours in after you. As you twist around the ring, with joystick and not mouse, there are icons of food which you seize with care (the arcade version was titled, "Food Fight"), gauging intake against a meter at the top left of the screen. Over-eating takes

a sudden toll on your speed! Forget to eat and the same penalty is imposed.

Escape? Yes, through one of the open doors at the edges of the screen and into a new arena, of which there are six. You are allowed to enter it, armed with a pie; this often extends your life. Once struck by a pin or seized by a clown, you are stretchered off to the first aide room. After the third trip, there is no return.

For all its effort to stimulate, speed up the blood, and focus your attention, MUDPIES is a wan version of the chase games, of APPLE PANIC, PACMAN, LODERUNNER, OILS WELL and the rest of the genre.

Playing it on the ST is something of a novelty, and it will keep you moving from arena to arena to discover what awaits you. The interruptions for the "Challenge Matches" -- mudpie slinging at unarmed clowns for bonus points -- or the rapid pace, charging from room to room, all this somehow misses the mark. Once you've seen the sixth room and how its configured, your fix is on the way and any slight addiction, for most, will begin to fade.

MUDPIES, as an early effort for the ST, is worth play and certainly will pose an initial challenge. If it were quarters into the arcade slot instead of merely pushing [RETURN] on your ST keyboard, the blood might rush a bit longer, but after several hours, you are likely to seek other challenges.

For those of you surrounded by the younger set, the under eight group say, the fantasy may persist a bit longer, and in fact, present a game with some genuine appeal.

1. LP disks are not standard Atari DOS format. However, one can use various utility programs that permit file transfers between LJK and Atari DOS.
2. LP has no double column capability. When I need to do a two column lay out for tables or lists, I use the tab function and cringe if changes are necessary.
3. Letter Perfect uses a superscript command to turn off a subscript command and vice versa. This works fine if you have a printer that works the same way. However, many printers, ours included, require a special command that turns off both functions, making it necessary to type in special printer control codes - gets even more complicated when you type multiple subscripts like in chemical formulas.
4. When deleting by word, the space adjacent is also deleted, making it necessary to always add space after deletion.

Although Letter Perfect is not as powerful as WordStar, it is easier to learn and use. Its extensive command structure qualifies as a professional word processing program, and ... it is a whole lot cheaper! I could ask for nothing more. Oooh! If they would do something about the 4 drawbacks, it would indeed be Perfect.

ATARI at NOVATAR

On Sunday, October 13th, Neil Harris, managing publisher of the Atari Explorer, spoke before the regular meeting of the Northern Virginia Atari Users Group. We videotaped Neil's presentation and that tape (one hour) is available to any WAACE club. Highlights from Neil's talk appear below. I have highlighted various phrases to help you scan these excerpts.



First of all, something that a lot of people have been interested in is ... the XM 301 modem. ... We have several thousand that are due in during the course of October. They're all packaged, they've got manuals, disks, free offers galore, you get a free hour on CompuServe, special offers from the SOURCE, DOW JONES, DIALOG, all kinds of services. ... it's very small and compact ... does not require a separate power supply.... The software was written by a guy named Russ Wetmore, the guy who did HOMEPACK, so it's very similar to the way HOMETERM operates.

The modem itself supports autoanswer as well as auto-dial ... and it also will feedback the tele audio through the speaker of your TV set so that you could tell if you've got a busy signal or some other strange thing is happening when you dial your number.... The retail price of this baby is \$49.95 and it should be showing up on the shelves of computer stores any time now.... It's a 300 baud only.... At this point we are not currently working on a 1200 baud modem for the 8-bit lines.

We've got another hardware product coming this month. It's the XMMB01 printer. It's a dot matrix, 80-column, 80 character/second printer that should be hitting our warehouses toward the end of this month so you can look for it in stores by the end of November....

As far as software products go, we've got five products hitting. One is the now legendary Learning Phone Cartridge, which, they assure me, should have hit the warehouse this past week.... The Learning Phone is the terminal program that lets you talk to PLATO's HOMELINK service. That requires a special terminal program because of its high resolution graphics.... I believe they managed to squeeze a free hour of time on PLATO from the CDC people for that product as well. That should be a \$29.99 list price product.

Going along with that, we've got the ProofReader.... That's the spelling checker for the AtariWriter package. We also have AtariWriter Plus that's hitting this month which is a double-side disk: one side for 48K or more machine and the other side for the 130XE version that takes advantage of the extra memory.... AtariWriter Plus also features a spelling checker and a great many features to make it as full-featured a word processor as we could possibly get out.... if you have a 130XE, it's got enough memory to do [double-column printing] without having a printer that has to go backwards.... It should be able to keep up with about 100 words per minute.... I'm really not sure of the price on that one at this point. [It has both overstrike and replace modes and you can turn off the word-wrap feature so that you can get columns to line up a lot easier.

Silent Butler is due, also, sometime in October as is a program called Music Painter.... The Music Painter allows you to create music on the screen with your joystick, in full color, three-part harmony, and play back songs. It comes with a whole collection of songs on disk already for you....

Aside from what Atari itself is putting out, we've had word that other companies are also supporting the 8-bit line and also the 130XE. There is a version of Paperclip coming out very shortly that has a 130XE version.... SynFilet is due out this month and SynCalc is due next month with 130XE support. Broderbund has another slew of programs coming out to support it as well. Xlent software's Typesetter program supports the 130XE too.

Let me move on to some ST stuff.... We've collected a disk of DEGAS pictures. DEGAS being the brand new drawing program from Batteries Included for the ST for color or monochrome. It supports various text modes.... I expect that copies of that will be shipping very shortly.



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COMPUTER LITERACY -

WHO NEEDS IT?

by John Barnes

This question is becoming more and more pertinent as parents struggle to understand what their children are doing in school, as consumers struggle to pay their credit card bills, as generals struggle to make their Buck Rogers toys work, and as scientists probe the innermost and outermost reaches of the universe. To the extent that these activities touch all of our lives we might say that everyone needs some degree of computer literacy and this view has become dogma in certain circles, particularly those related to education.

Unfortunately I have not seen a good working definition of computer literacy and I suspect that it is no easier to define than any other form of literacy. The success that educators have had in instilling literacy in the masses since the first bookkeepers, priests, and lawgivers started scratching on clay tablets is well known to all of us.

I would like to offer the view that no one needs any more computer literacy than they can make use of and that computer literacy is something one acquires only after one has acquired a modicum of other linguistic, mechanical, and mathematical skills. This view is based on the proposition that computers are nothing more than tools and, as with any other tools, the user determines, consciously or unconsciously, what attributes they should have.

COMPUTING FOR THE MASSES

When it comes to tools the world is divided into consumers, users, producers, and creators. Consumers are distinguished from the users of tools in that they do not confront the tools directly. Users wield tools to make products for consumers. Producers make the tools. Creators invent or modify the tools. The lines are not tidy because the same person can be simultaneously consumer, user, manufacturer, and creator with respect to different tools.

The consumers are of little interest in this discussion except for the fact that God created so many of them and they have the right to object if the products they consume are no good. With respect to computers they should perhaps be taught that "GARBAGE IN leads to GARBAGE OUT". Some percentage of consumers also vote, and politicians, who are another species of consumer, sometimes listen to them. Politicians need to learn that "numbers can lie and statistics are damn lies" (this is just another form of the lesson for consumers).

Users of computers are fairly numerous but most of the tasks they perform are merely extensions of the kinds of piecework performed in the sweatshops of the early Industrial Revolution. We can anticipate that the number of these people will grow. Perhaps one goal of the "computer literacy" advocates is to cure these people of a newly emerging disease called "terminalitis", which is a fear that pushing the wrong button will cause the machine to

explode. Young children are probably immune to this disease and there may be some merit in reinforcing their immunity by letting them bang on keyboards in conjunction with drills in spelling, arithmetic, typing, or some other skills that Boards of Education deem useful.

Part of the blame for the existence of terminalitis should be laid at the feet of the producers because their products all too often crash or produce bizarre results when the wrong key is pressed. Eradicating terminalitis will not produce a computer-literate populace, but it may allow us to realize more of the gains in productivity that we should expect from all of the computer tools that we have.

THE DAWN OF LITERACY

Some users consciously reshape their tools thereby becoming producers if not creators. Some ability to instruct computers in techniques for solving problems has spread out of the domain of the high priests. To the extent that these instructions cannot be communicated in natural language such users performe acquire some familiarity with the language of the computer.

This reshaping event marks the awakening of computer literacy. Note that the event has at least three distinct prerequisites: (1) a problem that needs to be solved, (2) a user who is motivated to solve it, and (3) recognition that a given tool admits of the modification necessary to effect a solution. This first reshaping event will frequently lead to others and, if the user draws appropriate generalizations from these experiences, the road to computer literacy in a broad sense opens up.

It should be obvious that the scenario that I have laid out for the awakening and development of computer literacy contains important clues showing why many users will never attain this state of grace.

First of all, problem solving at a level beyond instinct is something that precious few members of our society participate in. Secondly, the motivation to attempt solutions using one's own resources and the tenacity to pursue them to a conclusion are rare. Finally, the ability to draw analogies is poorly developed in most people. Fortunately there are a reasonable number of people who posess these qualities and there may be more in whom they are latent, awaiting development.

I find that people who posess the qualities that I have described above have developed an uncommon degree of what might be regarded as "conventional" literacy. They are adept in the use of language. They have good quantitative sense. Logic is not alien to them. They have access to a good store of facts. They are aware of the arts. In general they had developed these things before they learned to work with computers.

I would like the problem solvers of future generations to enjoy the same benefits. Let them learn to communicate in human languages. Let them grasp in their own minds the scale of things big and small. Let them know

cause and effect. Show them the accomplishments of their ancestors.

I am really afraid of the Computer Nerds who have left the real world for the artificial world inside the computer.

I have sidestepped the issue of defining computer literacy in terms of a knowledge of computer languages, or data structures, or computer architectures. Let the specialists toss their jargon back and forth while we pray that a few of them learn to converse with ordinary mortals (or at least to write instruction manuals).

WHAT WE CAN DO ABOUT IT

Many members of the Current Notes family feel some obligation to help other computer consumers and users who are at least interested enough to seek us out and ask questions. In this arena we play the role of producers. We work hard to disseminate the work of the creators among us (through our libraries, for example). We share our store of facts through tutorials and courses. We plan programs that will expose our members to new ideas.

If we carry out our activities taking proper account of the class structure of the computer public, if we learn to spot the awakening of true computer literacy, and if we work to improve the software tools that pass through our hands, we can contribute to a better world for computer consumers, users, producers, and creators.

I would like to dwell on the games that come in to our libraries by way of illustrating some general ideas for using the leverage that we have with our ATARI audience.

We should recognize that many of these are products for consumers. The computer is not a tool but a toy. Keying in mile after mile of DATA statements contributes nothing to computer literacy. Magazine publishers recognize that consumers are the most numerous species and publishing such material is nothing more than commercial pandering. Most libraries are taking steps to minimize the pain of distributing this material by copying the discs prepared by the publishers.

When we distribute original games in machine language or compiled form we should distribute the source code as well. It is possible that someone will learn something from this and thereby acquire a little more literacy.

Some games are useful as learning tools, others may help prevent terminalitis. If the games have these objectives they become tools and we should make sure that they are suited to their purpose. They should work. Fail-safes against errant keystrokes should be built in. If they need supplemental documentation it should be provided and it should be good. We can make these tools easier to use by supplying them in forms that are easy to use, perhaps by using a self-booting menu selection program. At the consumer level using a computer to play games should be no more difficult than driving an automobile to a chosen destination.

The only justification I can see for devoting so much effort to these games is that some few potential creators will be motivated to reshape them rather than simply trying for the highest score. If this helps to awaken computer literacy that is fine, but I am dubious.

In short, I think that there are enough games out there that we can afford to discriminate and let the magazines do the pandering.

Some games are really simulations and these use algorithms that demonstrate techniques that can be used to solve real problems. In these cases we should highlight the structure of the programs and see if that inspires someone to create.

The extension of these ideas to utility programs and tutorial programs is obvious. Make it work, make it easy to use, and make it teach.

In closing, I hope that I have convinced you that worrying about whether school children get 15 minutes or a half hour each week at the keyboard of an Apple, an Atari, or a Commodore is too trivial a concern. I hope you will be better able to guide the budding users in your own household. I hope also that you will be better able to appreciate the gift that is true computer literacy and that you will recognize that there are practical ways you can help to nurture it.

COPY-ALL XE IXL

by bruce blake

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COMPUTER AMBUSH:
Playing The Game
by Dick Knisely

In the April issue of Current Notes, Evan Brooks reviewed the game "Computer Ambush" by Strategic Simulations, Inc (SSI). While I agree with Evan's excellent review, it seemed to me that a straight review of the game could not convey the "flavor" of this game. In attempt to do just this, the article below is an account of a game of Computer Ambush that I played out recently, done in story form. The scenario played is the Raid game, using a standard squad and normal weapons distribution for the Americans. The German is a Level Two (average) opponent, and the game was played with the Blind option (only those men your men could actually spot are shown on the board). I should point out that in some ways this is NOT a typical game. I had played this scenario several times before and was very familiar with what my computer generated, German opponent was likely to do. And frankly, I was just plain lucky on several occasions! In most of my plays of this game, I have beaten the German, but not this handily and NOT if I allow him the Level 3, SS, troops. Enough introduction, here's what happened:

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There was a cool, crisp feel to the air and wisps of morning fog still haunted the depressions in the ground, especially the big craters made by the heavy artillery. Hours ago, Sergeant Buck Padooka's squad of ten men had crept into the tiny French village under cover of the predawn darkness. Somewhere in front of them, there would be a similar squad of German Wehrmacht soldiers waiting for them. A seasoned veteran, Padooka knew the job ahead could be a tough one -- but orders were orders, the telephone exchange in the village had to be put out of action. The hard part would be getting PFC Lee Cheng safely into the Government Building complex to plant and arm his plastic explosive charge. The Germans were sure to have several men in the building and several more covering the approaches to it. But getting this far had been easy. Assistant squad leader, Corporal Rodney "Rich-Boy" Richfield and four men, including Cheng, wait for the preplanned hour in an alley way between the two block long groups of small shops and cafes just west of the city square containing its once imposing, and now ruined, statue of a victorious WWI French soldier. On the other side of the square stands a large, impressive church, surprisingly undamaged. Inside the church, Sergeant Padooka waits along with the other half of the squad. The plan, worked out in great detail yesterday, is simple -- Padooka's group will attack from the church moving north across the street into the houses there (someone says its the old mayor's house!) and then west into the government building. Meanwhile, Richfield will move north in the shops to the west side of the government building. If all went well, both groups would converge on the government building and seize the telephone exchange in the middle of the large building. But all might not go well, this was Richfield's first real action since his promotion when the previous Corporal was cut down by a German machine gun and he wished he shared the Buck's confidence and icy calm.

At last 0630 came. Padooka motioned to the men around him in the dim light of the church and each began to execute his orders. The best man with a grenade in the squad, Pvt Marootian pulls the pin on his grenade and looks one more time at his target, the window in the corner of the mayor's house. With its commanding view of the street and city square, Padooka's combat instincts told him there would be someone waiting there. Stepping in front of the tall, narrow church window, Marootian lobs the grenade hard and steps back into shelter. At the same time, Pvt Wheelock begins sneaking across the church to take up a position near the main door to cover the open city square just beyond. Padooka and the huge bulk of Pvt Ben Hoss move into the north nave to cover the street to the north and watch the houses across it. Pvt Lawson sneaks out of the church to the north to take up a position behind the hedge that surrounds the church on three sides. Meanwhile, on the other side of the square, Cpl Richfield begins deploying his men, with Pvt Bastinelli cautiously moving into the building so that he can move through it and take up another position covering the city square and the south side of the government building. Although Bastinelli is slow, his enormous strength, built through years of weight lifting, lets him wield his heavy BAR with the ease most men use the M1 rifles. Pvt Dumke also enters the shops, but he will work his way to the north end, making sure no Germans have taken positions in the shops and then he will assume a fire position on the north end of the shops to cover the west side of the government building. Richfield, the machine gunner Pvt "Gunner" Garity, and Cheng will all move down the alley way, then into the next street to the west to shield themselves from view as they work their way to the north.

Seconds after the men begin to move, Padooka spots a German soldier in the window of the mayor's house. But before either of them can react, Marootian's grenade sails through the window next to the German, explodes with a crash and the German falls out of view. Padooka signals Lawson just outside the church to the east who then dashes across the street to the north under the covering watch of Padooka and Hoss. Marootian and Wheelock sneak west along opposite sides of the interior of the church. Padooka gives a small sigh of relief when Lawson gets across the street without drawing fire. On the other side of the square Richfield's men continue moving into positions, wary but not seeing any enemy -- Richfield hoping that was an American grenade he heard!

After seeing that Lawson gets across the street ok, Padooka turns and steps cautiously out of the church to the west to move along the outside wall while Marootian and Wheelock do the same way on the inside. But the moment Padooka steps out of the cover of the church, a German machine gun opens fire and chips of the church's stone wall fly. The German is positioned among the rubble around the statue in the very center of the city square and his fire, while not accurate, is enough to force Padooka to flatten himself against the rough outer wall of the church. The distinctive sound of the German MG42 alerts Bastinelli on the other side of the square, but it will be a several minutes before he can reach a position to see the square. The machine gunner now spots Marootian just inside the church and turns his fire on him. Padooka

takes the opportunity and dives over the hedge just north of the church wall; now able to see the gunner's position at the statue, he rips off a short burst with his automatic rifle. Fortunately, the German can't see either target clearly, and misses with both bursts, but so does Padooka's return fire. Marootian also sees the gunner and fires a burst from his automatic rifle, but misses too.

Meanwhile, on the other side of the square things start to happen as well. As Richfield dashes down a side alley to the west, a rifleman in the southwest corner of the government building fires a shot at him, but misses. Cheng and Garity follow him around the corner without incident and Richfield signals Cheng to enter one of the shops then move through it to take up a position covering the spot where the German was seen. While no one was hit by any of the fire, several of the Americans have exerted themselves to near their limits and will have to pause to catch their breaths, Padooka and Lawson in particular. To cover Padooka, Marootian fires on the German machine gunner to hopefully pin him down. This draws the German's fire onto Marootian, but the American's position in the church is a good one and the two only succeed in making it difficult for them to fire effectively at each other. But that's fine with Pvt "Doc" Wheelock, who has taken up a position on the other side of the church's main door, some thirty feet from Marootian. Doc sets his rifle down, pulls a grenade off his belt, prepares it and lobs it in the direction of the statue. Unknown to him, Hoss is doing the same thing, having moved outside the church to the north, clinging to the wall and then stepping around the corner to throw the grenade at the statue. Lawson, now 150 yards to the northeast just outside the mayor's house has heard the MG42 near the statue and raises his rifle. But as he does so, the first grenade goes off obscuring the German in a cloud of dust. Perhaps two seconds later the second grenade explodes, also a direct hit! The German now lies dead in the rubble of the statue.

After all this excitement, the next couple minutes are tense mainly because they are so quiet. Richfield's men on the west continue to move into covering positions, with Cheng having reached a position where he can see the corner of the government building where the rifleman was spotted. He will prepare a grenade for use once he's caught his breath. On the other side of the square all of Padooka's men have all moved outside the church and begin to move towards the government building. Apparently, no Germans are hiding in the southern offices of the building since they draw no fire from that direction. Marootian reaches the government building first, pauses, prepares a grenade and steps cautiously along the south side. Reaching the southwest corner he falls prone, crawls around the end of the building and flips the grenade through the door into the room where the rifleman was spotted. While Marootian is doing this, Wheelock takes a grenade off the German machine gunner's body and then trades his rifle for the German's MG42. Lawson, still in the northeast area near the mayor's house, takes a position to cover the east and north sides of the government building. As Padooka and Hoss move to the southeast corner of the government building, they hear an explosion off to the west and see debris fly out of the north window of one of the buildings in Richfield's area. Fortunately, the grenade has missed

Dumke who was its target and instead exploded harmlessly in the room next to him! Dumke does not see the German who threw the grenade, but from the direction from which it came, there must be someone hiding in the abandoned gas station and garage area about 75 feet directly north. Garity and Richfield, moving north along the street will be able to spot this suspected position in a minute or so. In the meantime, Dumke prepares a grenade and tosses it across the street at the suspected enemy position.

Bastinelli has finally moved all the way east through the row of shops, emerging into the city square and then dodging north along the edge of the shops. As he does so, he hears the explosion from Marootian's grenade, and a cloud of dust is visible in the room where Marootian through it. Seconds later another explosion is heard in the village, this is Dumke's grenade going off in the gas station, and a terrible scream is heard immediately afterward -- it would seem Dumke guessed right. At almost the same time, Hoss reaches the main entrance to the government building with Padooka. Hoss cautiously steps into the entryway alcove and is fired upon by someone with an automatic rifle in the interior of the building, but the shots miss. After Hoss ducks out of the way, the German begins firing directly south through two doorways at Wheelock who is just visible as he struggles to prepare and load the MG42 he took off the dead German. These shots miss also, giving Hoss time to prepare a grenade and Wheelock time to bring fire on the German with the machine gun, but all shots miss. Padooka enters the building through a window just to the east of the main door and begins to move along the main interior hallway. Hoss dives in front of the main entrance and flips the grenade across the hall into the large central room where the telephone exchange and the German soldier are.

To the west another explosion is heard, this time in the street just outside the room where Cheng is hiding -- our luck holds, the grenade was undoubtedly intended to go off inside that room surely killing Cheng. Loss of Cheng would be a near disaster since only he can reliably prepare and set off the plastic explosive! To Cheng's northwest, Richfield and Garity have taken positions in some rubble on the north ends of each row of shops where they can cover the entire west side of the government building. Under their cover Cheng can now move out of the shops and move toward the government building to plant the explosive as soon as Padooka's team has cleared a path into the telephone room. Dumke climbs out of the window where he has been hiding and joins Cheng in moving eastward from the shops to the large building.

Padooka knows that there is probably one, maybe two, more German soldiers within the government building, but with luck the explosive can be planted quickly and it can take care of any more of the enemy when it brings most of the building down. He and Hoss are joined by Wheelock and Marootian and the four of them move through the government building cautiously sneaking around to check for anymore Germans. About that time Cheng also enters the building and moves toward the large room to begin planting the explosives. Before he can get there, Hoss who is in that room is fired on by a German with an automatic rifle who is firing across an interior courtyard of the building and

through a window. The shots miss, Hoss and Wheelock return fire to pin the German down. Lawson, who has now moved from across the street to the north side of the building, prepares a grenade and tosses through a door and down the hall, intending for it to land in front of the doorway of the small room with the German soldier in it. Hoss and Wheelock are joined by Padooka in firing on the position and they apparently succeed in forcing the German to duck since his fire stops. This gives Cheng a chance to enter the room and prepare the explosive, setting the timer to two minutes. Although Lawson's grenade goes off just where he intended, there's no way or time to be sure it got the man inside -- all the Americans begin quickly moving out of the government building to wait for the explosive to go off. Sure enough, exactly 120 seconds later there is a tremendous roar inside the building the entire center of which collapses. Padooka checks quickly and finds all his men alive and unhurt, a remarkably good job even for his squad.

=====

This game also shows the main problem that I have found with the game. Weapons fire rarely will hit and although this is, in fact, historically accurate, it makes the real flaw show up even more -- grenades are too powerful. The game allows a player to throw a grenade with high accuracy over great distances -- like through a window over 100 yards away with an almost total assurance of a kill. The result of this combination is a strong emphasis on the use of grenades, weapons fire is suitable only for pinning someone down so you can lob a grenade on him. While that's not totally unrealistic, it seems excessively biased in that direction to me. However, despite its flaws, I still enjoy the game tremendously. It's flexible, fun to play, and challenging. If you like thought provoking strategy games, you should take a long look at this one. I think it represents the tip of the iceberg of possibilities for combat games for home computers. Just imagine the artificial intelligence and real time graphics possible on a machine with the memory and power of the 520ST -- are you listening out there SSI??

Atari to Work! (Continued from page 17)

Using the Atari is easier and cheaper than using a time-sharing system.

Video Stores could keep their movie lists on the Atari computer. Several databases on the Atari will store up to 2,000 titles.

Any business can take advantage of SynCalc -- a low-cost user-friendly spreadsheet for the Atari. Spreadsheets created with SynCalc can be sent via modem to systems running larger spreadsheets.

Of course, there are many applications for low-cost computers. It makes sense to be creative and imagine applications that can be ported to low-cost systems. With the cost of the Atari 800XL computers being quoted at less than \$100, managers should seek applications to put on the Atari before looking at much higher-cost systems.

Our company, XLENT Software, has over 20 computers. The operating systems that we have include MSDOS, CPM, TOS, Atari, Apple, and others. We have found that availability of a computer is much more important than the operating system. It seemed that as we tried to standardize around higher cost computers, there were never enough of them to go around. We, therefore, moved as many applications as we could to low-cost computers. After all, I never could get this article typed if I had to wait until my wife was finished using the MS DOS computer. With an Atari in every room, I can do my work undisturbed whenever I want. At the the low prices they are currently being sold at, everyone who ever thought about buying a computer should go out and buy an Atari computer. Even if the family already owns a computer, it is worth the price just not having to argue over who gets to use the computer.

CLOCK ROUTINE

This machine language routine will put a clock at the top of your screen. It will continue to run until you press SYSTEM RESET or write to page 6. You could include it in a game program to show elapsed time.

```
10 GRAPHICS 0: REM CLOCK By Edward Chu
20 FOR Q=1535 TO 1676:READ A:POKE Q,A:
NEXT Q
30 ? "LEFT MARGIN";:INPUT A:POKE 0,A+6
4:?: "SET TIME HR,MIN,SEC";:INPUT A,B,C
:X=A:GOSUB 60:POKE 203,X:X=B:GOSUB 60
40 POKE 252,X:X=C:GOSUB 60:POKE 253,X:
POKE 1,PEEK(106)-4:X=USR(1535)
50 ? CHR$(256):END
60 Y=INT(X/10)*16:X=X-INT(X/10)*10+Y:R
RETURN
```

```
100 DATA 104,169,11,141,36,2,169,6,141
,37,2,96,248,24,160,0,230,255,165,255,
201,6,144,56,24,132,255,165,254,105,1
110 DATA 133,254,201,16,144,43,24,132,
254,165,253,105,1,133,253,201,96,144,3
0,24,132,253,165,252,105,1,133,252
120 DATA 201,96,144,17,24,132,252,165,
203,105,1,133,203,201,19,144,4,24,200,
132,203,160,0,165,203,216,32,118,6
130 DATA 169,26,145,0,200,165,252,32,1
18,6,200,165,253,32,118,6,169,14,145,0
,200,165,254,133,204,32,130,6,76,98
140 DATA 228,133,204,74,74,74,74,24,10
5,16,145,0,200,165,204,41,15,24,105,16
,145,0,200,96
```

Computer Baseball

by Kenn Lara

For baseball fans who crave strategy and statistics, Computer Baseball, which I will now refer to as CB, is for you. It's from Strategic Simulations Inc. for \$39.95 and comes packaged in a small box that contains the following: two sided game disk, rule book, (2) player's aid cards, and famous World Series matchups manual. This manual has historical background on 14 classic World Series games and their participating teams. Its selection spans from 1906 to 1980. Those 28 World Series teams are found on the game disk and include notables such as the '27 Yankees, '62 Yankees, '69 Mets, '75 Reds, and '80 Phillies.

The rule book doesn't state this but Atari BASIC is required to play CB so make sure you have it installed before you boot the disk. The game loads in automatically. Five options then present themselves: (1) playing a game against the computer, (2) playing a two-player game, (3) entering data for a new team, (4) reviewing or editing data in an existing team data file, or (5) demo game.

When beginning a game players and/or computer choose a starting line-up and pitcher from available players. The computer then determines which team will bat first. On screen a typical baseball field is displayed with pitcher, batter, infielders, and outfielders at their normal positions. A scoreboard is also shown which displays the number of hits, errors, and runs.

On defense a manager has seventeen options. Some of which are aligning the infield and outfield, visiting the mound, warming up a pitcher, how to pitch to a batter, pitch to batter, and saving a game. On offense a manager can tell his players to hit away, hit and run, steal, bunt, run aggressively, run normally, run conservatively, or save game. He can also change his bull pen. Each of these defensive and offensive decisions can lead to a great variety of outcomes. Any outcome of play is determined by numerous factors which include hitter's batting average, his speed, outfield alignment, infield alignment, pitcher's ability, etc. After the defensive manager inputs his commands the result of each play is then displayed. Results can be hits, outs, or runs scored.

If you get tired of playing with teams found on the disk you can always create your own. Option three, entering data for new team, can help you accomplish this. This option asks you to input team statistics which include team name and year, after that individual statistics of players are input. When everything is done, team data can be saved on disk. The manual gives good instructions on how to enter new teams and edit old ones so problems with this section should be few. You can be quite creative during this point. How about a team of last year's all-stars or a team of baseball's greatest players? Imagine Cy Young pitching to Hank Aaron with Yogi Berra catching, the possibilities are endless! Strategic Simulations also sells data disks which contain all Major League teams for a given season.

The demo game option can be useful and fun to watch. You can see how the computer plays itself and gain some tips on choosing starting lineups and pitchers. When to send in relief pitchers can also be learned as you watch the computer play.

While CB is a very good simulation it does have some weak points. For starters it's coded in BASIC and can be slow at times. The program also does some disk chaining which further slows it down, so expect to spend an hour playing a game. However, it can be saved to disk at any desired inning. Another minus is that it doesn't take advantage of the Atari's unique graphic and sound capabilities. What we get instead are primitive character graphics displayed on a green background. CB has a joystick and paddle option for Apple computers but not for Atari. Doesn't SSI know that almost every Atari owner owns a joystick. Can they say the same for Apple owners? Having this option would have streamlined the entering of commands.

CB is rated as an introductory level simulation but the computer is a tough opponent. A novice can have a hard time playing against it when both teams are equally good. What about placing some awful teams like the '55 Senators or '81 Mariners on disk as introductory level opponents? This would aid newcomers in learning to manage a team to victory.

Gamers who want to reenact a playoff or championship series will be hampered because there is no option for playing a series of games. You can still play a series but you must do all the necessary multi-game bookkeeping.

A thoughtful feature is the printer option. It can print out your team roster including individual stats and a game's final stats. The output is very readable; it's identical to ones found in the sports section of newspapers.

Even with these minuses, I still enjoy playing CB. It has a lot of detail and realism which makes it a highly playable simulation. While graphics are rudimentary, they do provide all the necessary information. Anyway, it is a game based on mental capabilities not arcade skills. A thoughtful addition is the printer option. It can print out your team's statistics and a game's final statistics. If you like baseball and want a good simulation of it on the managerial level, buy this game. You get your money's worth with this one. So next time there's a Major League strike, boot up Computer Baseball and play ball!

Time to Renew?

Be sure to check your mailing label. The date on the first line in the form YYMM, for example 8512, is the year and month when your subscription/membership expires. The issue of CURRENT NOTES you receive that month will be your last unless you renew on time. If your mailing label shows 8511, this is your last issue of CURRENT NOTES.

Neil Harris at Novatari

(Continued from page 33)

To go along with this, we have a program called Neochrome. The version 0.5 being the real official one as opposed to all those other ones that sneaked out early. Neochrome and STwriter are both being made available as basically freeware. We are giving them away, but we are retaining copyright.... Neochrome is a very slick color drawing program for the low-resolution color graphics mode on the ST. STwriter being a fairly high-powered word processor that's very, very similar in the way it works to the original AtariWriter. That program supports printing to disk and many other functions that weren't in the original AtariWriter. It also has a special mode so that you can plug your 850 interface into the back of the ST and port all your old files up to the ST. And, it does support 80 columns since that's what the ST has.

... there are going to be at least 60 software products out and another handful of hardware products out before the end of this year to support the ST.... There's a lot of programming languages coming. Hippo C is already out, Lattice C should be out, maybe December, maybe January. There's a Modula 2 compiler that's done and we're just trying to figure out who's going to sell it at this point. There's even a BASIC compiler which is available from Byline.

I guess I should mention at this point that Atari has released ST Basic at long last and we are, at this point, reproducing the disks and the manuals and we plan to ship one copy of this to every person who sent in an ST warranty card.

...The developer's documentation, by the way, is in the hands of some editorial people and we are planning a distillation of all the real important calls and hardware specs and things like that. That should be out in book form, hopefully, before Thanksgiving, from Sybex books.

We're still hoping at this point to get the actual [CD ROM] drive out by the end of this year.... it still looks like Atari will be the first company to get a real hard disk out on the market for people. It should be a 10 megabyte hard drive and, again, before the end of this year is what we are targetting for actual shipments to dealers....

... we are still planning on releasing GEM for ROM sometime during this month.... What that means is that once we release it, it's a four to eight week process to get mass roms back from the orient.... So, what I expect is that sometime during the month of December, the ROMs will arrive and, at that point, you'll be able to go to your dealer and pay him \$20 and get a set of ROMS.

... The Christmas rush is already upon us as far as we're concerned. We're selling machines as fast as we can get them into people's hands.

...we are totally cognizant of what was planned and what is planned to be in the Amiga machine. We had an

option to take that machine as one of our own and due to some interesting circumstances we, basically, made our own decision not to go with it. If you want my capsule description of what the differences are between the machines, I'll be glad to go ahead. I'm basing this on what I've read about Amiga and what technical information I can dig up. I've not yet had my chance to get my hands on it.

The Amiga was designed about three years ago, as far as the hardware part of it goes. It was designed to be, originally, a \$700 game console with no keyboard. It was going to be THE wizbang ultra game system with stereo sound and all the great features that we know are in it with all the different processors: a graphics processors, a memory blitter and things like that. When Atari engineers ... looked it over, they decided that, with today's technology, they could do better. So, what we've done in the ST is we've optimized what we think is really THE key features to a personal computer today. And, the key features are, we felt, fast CPU speed, fast I/O, and, of course, low cost. There are many [four] custom chips, ... They are not processors. They are support chips... They are sitting there to help the hardware of the system move things along.... During half a cycle they are being used by the video and during the other half of the cycle they are being used by the CPU so there are no wait states for the CPU to slow it down. For that reason, we've got a full 8 megahertz being pumped -- 8.01 megahertz actually -- out of the 68000 which is a lot more than they are getting out of the Amiga. Ideally in an Amiga, they're getting 7.16 megahertz. Practically, they're getting a lot less because the graphics chips and support chips basically put the CPU to sleep during various operations they call a wait state. The Amiga was designed to optimize animation and sound. And animation and sound are wonderful things, but for a \$2,000 computer system, I have to wonder who's really going to want that.

We think [the ST is] more of a practical machine for what people are going to use -- for word processing, for databases, for spreadsheets, for telecommunication. It's got many features built in that will make that machine out-perform any other machine on the market. The Amiga will do great cartoons which is wonderful, but we really think that when people see those machines side by side and the smoke starts clearing from all the hype that they've been able to generate over the systems, when those two machines are sitting side by side in a store, and you look at the performance and you look at the price tag, we think we'll blow them right off the map.

He [Jack Tramiell] believes that, if you want to be successful, you've got to offer very high performance and you've got to keep the price down. And not just the price on the basic system, which is a low-ball item in many cases, but you've got to keep the expansion price down. You've got to keep the price of all the peripherals down and all the software down and all that. And that's where we're really going to get people once we make them aware of what it costs to expand our system as opposed to what it costs to expand that other system out there. And what it costs to buy a MacIntosh or an IBM PC to get the performance.

There is somebody working, a couple of somebodies working, on a PC emulator. I understand our engineers have started thinking about how that should work in case we want to do it ourselves. We are looking at a hardware approach and not a software approach which is the only way we see to get true, 100 percent compatibility....

There is also an Atari 800 emulator in the works. We don't know exactly when that is going to happen or what form it will take, but our engineers are looking very seriously at how to make all you people who have a great investment in your system happier by upgrading.

...I'm talking to The Source and, sometime during the course of the next few weeks, I believe, we will be able to turn on the Atari Information Service - the official service - on The Source.... For this special service, which will really be a separate little system that won't exactly look like the Source -- it'll look like the Atari service -- there will be no sign-up fee, there will be the low SIG rates which are \$6 in the evening and \$10 an hour during the daytime. That's without any surcharges for networking. We plan to have a great deal of text information and software downloads and a fairly good bulletin system set up there as well. And that will be available on a national basis to anyone....

... We've got a three and a half inch drive mechanism that works with [the XE]. We've got an OS that works with it as well. I believe our people are looking into what the feasibility is of going over to a new disk drive for this product line.

... the XEM was kind of put on the back burner mainly because of that one chip, the AMY chip, which we were never able successfully to put into Silicon and get working from a breadboard. We've licensed that technology to an outside company to finish the development of it. They plan to put it in a synthesizer and at some point, when they get that working as a chip, we still have the rights to use it in whatever products we desire....

... There are two expansion boxes coming from us, probably not till next year, for the ST. One is an eight slot box that lets you plug in eight devices to the ST at one time through the DMA port. That would be memory boards and all kinds of other goodies. And the second is a full 32-bit computer in a box that will plug right back into the ST. That will be a 32-bit processor running very quickly, even faster than the 68000 in the ST right now.

... We have not yet made the final determination [on the kind of chip]. We have looked at a lot of possibilities. It looks like the 32032 has been ruled out because it tends to be slower than a 68000. So we are looking at all kinds of things. The 68020 is one of the possibilities. There have been three or four others as well that we've looked at that we think will provide better performance. The hardware has been put together in such a way that it doesn't much matter to us which chip we use and we can get the thing together very quickly. We should be able to show it early next year. It will use the STs I/O. It will use the STs graphics, but it will

give you a separate cruncher if you really need that kind of processing capability.

... There's lots of things cooking in our laboratory. There's a lot of stuff that I really am not at liberty to talk about as far as what's going on in the back rooms. But we had Phil Lemmons in, who's the editor and chief of Byte. He came by for a visit and we gave him the tour and had him meet some of our top technical people. And after he saw what was in the laboratory that he was not permitted to disclose, he just said to us, The world doesn't realize how far ahead of Apple we are as far as technology we've got sitting in our labs right now. We've really got some stuff cooking and we really can work fast as you've probably noticed. There's going to be all kinds of goodies. Basically, Atari is not a game company. Or is certainly not a game company anymore. Atari is a company that is dedicated to bringing high technology, at a low cost, to consumers.

.... And there's lots of MIDI software that's coming too. We saw a program working in Leonard Tramiel's office.it had a full color graphics screen with the staffs of music and lots of drop-down menu commands and things like that to place music through the MIDI. It really sounded tremendous.



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W-A-A-C-E -- Club News**A.U.R.A.**

The A.U.R.A. officers met on Sunday, October 13th. The agenda included nominations for the following year and a review of club operations. Candidates were identified for all the positions and several committee chair positions. These nominations will be announced at the November meeting, after we have determined the person's willingness to serve. Elections will be held at the December meeting.

Up to \$700 was authorized to purchase a 130XE system for the club, including a monitor. Between meetings, this system will be used by the librarian. The following schedule was established for meetings:

7:00-7:30 Beginner's corner/Library Sales
 7:30-8:45 Main meeting program
 8:45-9:00 Q/A period
 9:00-9:30 Informal discussion

It was decided to monitor interest in the ST among members and to appoint an ST program chairman as soon as there was sufficient interest. The search for a meeting place with sufficient room and parking is being reopened. An annotated Atari reading list will be prepared. An evaluation questionnaire will be prepared and distributed at the next meeting. Participation in the PC fest and the Atarifest was reviewed.

N.C.A.U.G.

At its October meeting, the National Capital Atari Users Group discussed new developments with the "ST" computer and the recent visit of Atari official Neil Harris. Recent Atari Corp. developments include release of the XM301 modem for \$49.95 with software by Russ Wetmore, autoanswer, and autodial. AtariWriter Plus software is expected soon.

Several new disks were added to the disk library including a complete AMODEM 7.1 disk with all handlers and an audodial file generator. The utility disk with Disktool and Doswiz has been replaced. A new disk with pictures was added too. The club is still seeking a program chairperson. The October swap was scheduled again for the November meeting due to lack of notice. There will be lots of hardware and software for sale or swap at the November meeting. So be sure to come.

C.P.M.

November Meeting: The next meeting is scheduled for November 26, 1985, at 6:30 p.m. (the fourth Tuesday of the month). Be aware that the CPM meetings are now held in larger quarters - the MEETING ROOM. There is no meeting scheduled for December. The next scheduled meeting, after November is January 28, 1986 at the usual location.

Membership Renewal: Note, 1986 member dues (\$3) and subscription fee (\$12) to CURRENT NOTES are due by

December 31, to our treasurer. Please make his life easy by paying on time. Remember, his is a voluntary position. Mail your \$15 to: Reg Brown, 9325 Bentridge Road, Potomac, Md. - 20854

Bulletin Board System: Bulletin Board System is on-line. Are you using it? Do you have any suggestions for improvements. Frank Huband is the SYS/OP leave him a message if you do or contact one of the other club officers. Don't forget, if you desire to contact club officers between meetings, you can leave your message on the board. The primary commands necessary to navigate the Board are:

C = Exit to CP/M	E = Enter message
F = List subject files	G = Goodbye (non-cp/m mode)
K = Kill message	R = Read message
S = Quick summary	N = Read New message

Once in cp/m mode, files can be downloaded or uploaded to this RBBS. The procedure is as follows:

- To DOWNLOAD from drive A> the command syntax is: XMODEM S FILENAME.EXT
- To DOWNLOAD from any other drive, return to drive A> and type: XMODEM S DRIVE # FILENAME.EXT. For example, A> XMODEM S B:NSWEEP.OBJ
- To UPLOAD a file, at the A> prompt, type: XMODEM R FILENAME.EXT. This alerts the system that you are about to send a file. Then go to the command line in your terminal program and insert the appropriate commands.
- To logoff while in CP/M mode, type: BYE

Library Disks: Last month (Oct.) in CURRENT NOTES we provided a complete condensed listing of all major programs in the CPM library as promised - thanks BOB DANSON. The library currently consists of 18 cp/m disks and all ANALOG disks since issue #20. Library and ANALOG disks are available for purchase at monthly meetings. The cost of each disk is currently \$3.00 plus \$1.50 shipping for each two (2) disks or fraction/multiple thereof ordered by mail. Please allow two weeks for processing mail orders - especially during the Christmas rush. Mail orders should be addressed to: Dr. Mike Abramowitz, Disk Librarian, 8732 Sleepy Hollow Ln., Potomac, MD. 20854.

NOVATAR

Those members who attended the October meeting were treated to an exciting and interesting evening as Neil Harris talked for over an hour on Atari news and developments (see separate article in this issue). Since ATARIFEST is scheduled the day before the regular November meeting, it will replace the November meeting.

ST Special Interest Group. The ST SIG was formed at our October meeting as 15-20 new ST owners met for the

W.A.A.C.E. -- Club News

first time. A second meeting was scheduled for SUNDAY, October 27, at 6:00 pm in the small auditorium at the Washington Gas Light building. Plans are to discuss future meeting places, times, and what to do with the SIG. Drop by our ST table at Atarifest or call Evan K. Wallace anytime (703) 620-9144 or Ken Whitesell days (703) 697-7235 to find out more about the ST SIG.

Local Chapters. We are encouraging the formation of small local chapters of NOVATARI. There are a lot of benefits available at the larger meetings, but there are also many advantages to being able to leave for a 7:30 meeting at 7:25! The local chapters are designed to be small, informal, social gatherings where friends and neighbors can gather and chat Atari-stuff. The entire Novatari library, as well as any blank disks the chapter may want, will be made available to each local unit. Funds obtained from library sales will remain with the local unit. This will allow members to get library material without having to travel to the main meeting and, at the same time, bring some income into the local chapter. All it takes to start a local chapter is the desire. Rooms are usually available at little or no expense in libraries and community centers. Anyone interested in forming a chapter in your town, give me a call -- Joe Waters (450-4761). If you can make some plans before the Atarifest, you can tell prospective new members attending that event about your chapter.

NOVATARI - Sterling. Palmer Pyle launched the first "local" chapter of NOVATARI on October 17th with 13 people, including a couple of new members, in attendance. Volunteers were found to handle several functions such as librarian, publicity, equipment and programs. The group chose the first Thursday as the regular meeting time. The next meeting will be on November 7th in the Sterling Community Center Annex. For further information contact, Palmer (437-3883).

NOVATARI - Vienna. Although some details remain to be worked out, Earl Lilley is helping to form a Novatari chapter in Vienna. Tentative meeting dates are set for the fourth Monday of each month. For further information contact Earl (281-9017).

ATARIFEST '85

The first, exclusively Atari Computer Fair in the metropolitan area will be held at Fairfax High School, 3500 Old Lee Highway, on Saturday, November 9, 1985 from 10:00 - 4:00. This event is co-sponsored by the Northern Virginia Atari Users Group (NOVATARI) and Fairfax County Adult and Community Education. There will also be representatives from local computer stores to demonstrate their Atari-related products. Several Atari Users Groups in the area will be participating and will have a wide selection of disks available with public domain software programs for the Atari.

The new Atari 520ST and 130XE computers will be featured with the latest in Atari software, as well as some

of the versatile commercial software available for the Atari 800 and 800XL computers. Demonstrations and seminars of home applications and educational software, graphics capabilities, and computer languages will be available throughout the day. We will also have a video tape of the incredible encyclopedia on a disc for the Atari 520ST.

There is no admission charge. We will be giving away door prizes every hour during the Computer Fair.

Recreation at ATARIFEST. SSI products will be demonstrated by Evan Brooks, NOVATARI's answer to Ronald Reagan's prayers. ATARI's games are so well known and so numerous that they will be shown on tapes. Dave Meyer (455-7145) is gathering this table together.

Education at ATARIFEST. Software for many levels of education from preschool to graduate school is being amassed by Diane Burdt (425-5073). LOGO, a language particularly developed for education, will be demonstrated. Applications of LOGO in other areas will show the usefulness of this language. Educators, call Diane.

Music at the ATARIFEST. Exciting, foot tapping times are ahead when Jim Hurd has Chuck Levin's MIDI going on the 520 ST. Atari users will also get to see many other musical programs on the 8-bit machines manned by Steven Steinberg. If you can help Steve, call 435-2962.

Productivity at ATARIFEST. It's SYN, SYN, SYN at the ATARIFEST. Bob Waterfield and Linda Winograd will couple up to show how word processors and databases and spreadsheets can really produce something grand. Gary Purinton (476-8391) is chairman of these events.

Languages & Utilities at ATARIFEST. What language does your Atari speak? Basic, Assembly, Action, or what? OSS catalogues and ICD flyers will be available for you. If you can demonstrate some utilities, get in touch with Ed Seward (960-6360).

User's Groups at ATARIFEST. AURA, NCAUG, NOVATARI, SMAUG, and WACUG will be there with their libraries of disks. A splendid time for you to get the creme de la creme of public domain software! Join also the group of your choice. Any UG that wants a table should contact Joe Waters (450-4761).

Two SIG (special interest groups) will be holding session too. Even if you belong to a UG, a SIG may be even more helpful for you. Dick Knisely(476-0529) is chairman of the TELECOM group and table. Evan Wallace (620-9144) is co-chairman of the newly formed ST SIG and will accept help with the ST displays. A videotape of the new CD-ROM by ACTIVVENTURE (the encyclopedia on a disk) is just one of the awe inspiring programs.

Commerce at ATARIFEST. Besides the companies mentioned at other areas Discovery will be lending a hand. Come see what STS, Fairfax Computer Products, Black Patch Systems, Xlent, HAL, CALCOM, L & Y, Applied Computers

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Associates, and CompuGreet have to offer without you having to drive all over three states(I just granted DC statehood). David Beifield will be showing his Draw 7 and other programs also.

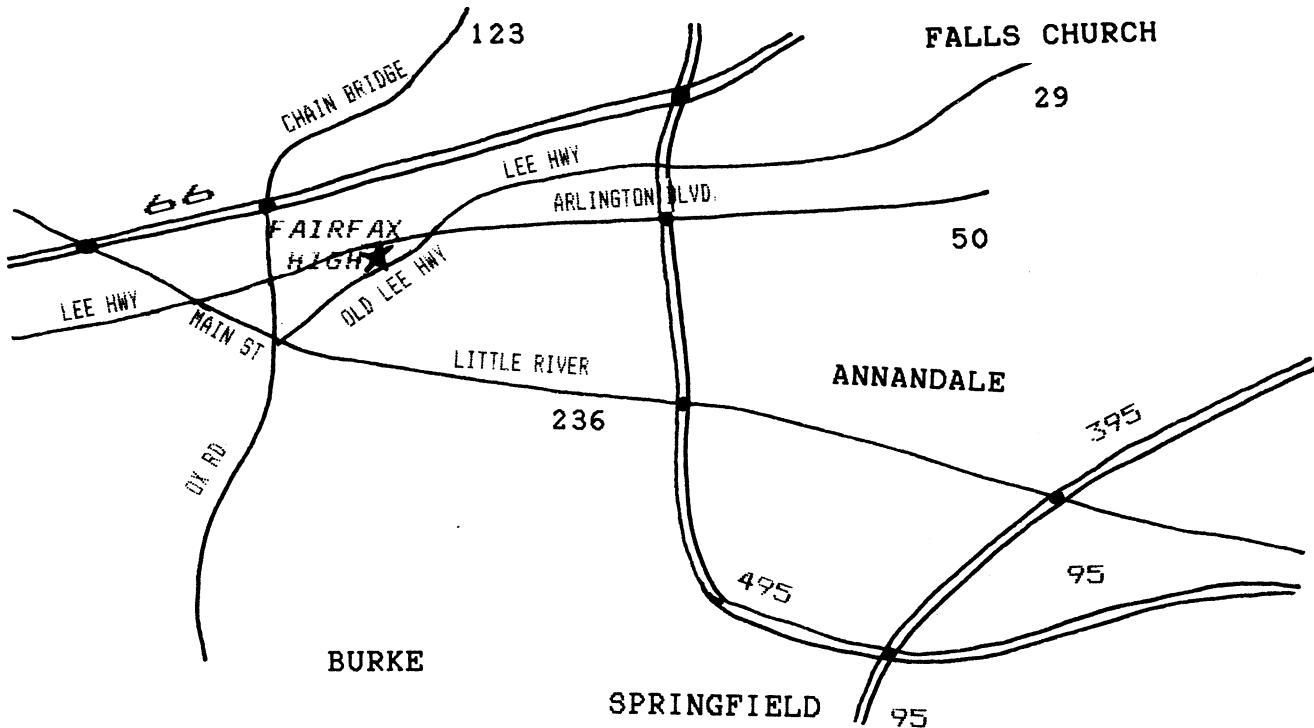
Arigato to Atari Users. Georgia Weatherhead wishes to thank the Atari Users. Not one person she called said "no". With such splendid cooperation this will be a "yes,yes" affair. Many have volunteered and she will get to you by phone if you are still unassigned by the first week in November.

ATARIFEST VOLUNTEERS. If you see an area that interests you, please call the chairman of that area and let them know what you have to offer. It may be expertise at running demonstrations, babysitting the equipment for demonstrators to take a break, or equipment. I assure you, each chairman will be delighted for any offer of assistance. If you are a company, call Terry White(560-7726) or Georgia Weatherhead(938- 4829) to reserve a space.

DID YOU KNOW THAT ATARI MEANS SUCCESS?

ATARIFEST '85

VIENNA



The W.A.A.C.E. HOTLINE

The individuals below may not all be experts but they have managed to at least get everything working. If you are having trouble, just give a call to somebody who might be able to help you out. Please -- no calls after 10:00 p.m. If you would like to add your name to this list, either to a category already here or to a new one you feel should be represented, call Georgia Weatherhead (703) 938-4829. Unless otherwise indicated, all phone numbers are area code 703.

Disk Drives

PERCOM Jack Liedl (273-4256), Dale Radtke (569-8795), Greg Black (938-0748), Gary Purinton (476-8391), Cliff Trump (323-7184)

1050 Ron Peters (780-0963)

INDUS Greg Black (938-0748), Dale Radtke (569-8795)

ASTRA Dale Radtke (569-8795), David Lankford (938-6743)

TRAK Roger Morihand (630-9151), Dick Caldwell (356-4248)

RANA 1000 Mike Focke (620-2776)

Printers

ATARI 1027 Dave Meyer (455-7145)

ATARI 1025 Dale Radtke (569-8795)

ATARI 825 Frank Budelman (750-0079)

EPSON Dick Knisely (476-0529)

MANNESMAN TALLY Duke Wheeler (281-6653), Gary Purinton (476-8391), Cliff Trump (323-7185)

OKIDATA Roland Gabeler (620-9142)

PANASONIC Dennis McCormick (430-9552), Jim Parks (533-1754), Terry White (560-7726)

PROWRITER Greg Black (938-0748), Rick Frick (573-1382) Ron Peters (780-0963)

SMITH CORONA Richard Fichter (378-7023)

TPI David Lankford (938-6743)

GEMINI 10X Jim Stevenson (378-4093), Dick Caldwell (356-4248)

Languages

ASSEMBLY Dale Radtke (569-8795)

ACTION Richard Fichter (378-7023), Jim Stevenson 378-4093

BASIC Dale Radtke (569-8795)

BASIC XL Terry White (560-7726), Dick Knisely 4(76-0529)

C ??? Any volunteers ???

FORTH Clarence Connelly (437-6353), Roger Morihand (430-9151)

LOGO Georgia Weatherhead (938-4829)

PASCAL ??? Any volunteers ???

Telecommunications

1030 Allen Eckert, Harry Poulter (751-2738), Cliff Trump (323-7184)

MPP Dale Radtke (569-8795), David Lankford (938-6743), Dick Caldwell (356-4248), Jim Parks (533-1754)

HAYES Richard Fichter (378-7023), Gary Purinton (476-8391)

HOMETERM Dick Knisely (476-0329), Scott Trump (323-7184), David Lankford (938-6743)

AMODEM Gary Purinton (476-8391), Mike Focke (620-2776)

Word Processors

ATARIWRITER Gary Purinton (476-8391), David Lankford (938-6743), Jim Stevenson (378-4093), Linda Winograd (860-0278)

BANK STREET Adair McConnell (938-3525)

LETTER PERFECT Dean Miller (560-3533), Norm Bolton (476-9690), Steve Steinberg (435-2962)

PAPERCLIP ??? Any volunteers ???

TEXT WIZARD Dick Knisely (476-0529), Clarence Connelly (437-6353)

The WRITER'S TOOL ?? Volunteers ??

Database

DATA PERFECT Gary Purinton (476-8391), Don Tucker 229-5379

Dean Miller (560-3533)

FILE MANAGER BOO Linda Winograd (860-0278), Scott Trump (323-7184)

SYNFILE Linda Winograd (860-0278), Bob Waterfield (301-840-0795)

Spread Sheets

SYNCALC Dick Knisely (476-0529), Bob Waterfield (301-840-0795)

VISICALC Norm Bolton (476-9690), Marvin Bleiberg (385-8823)

Statistical

SYNTREND Bob Waterfield (301-840-0795)

Music

Atari.MUSIC COMP Steve Steinberg (435-2962)

MUSIC CONS. SET Steve Steinberg (435-2962), Dick Knisely (476-0329)

ADV MUSIC SYS Steve Steinberg (435-2962)

BANKSTREET MUSIC WR Steve Steinberg (435-2962)

Disk Operating Systems

DOS 2.0 Dick Caldwell (356-4248)

DOS XL Terry White (849-1725)

SPARTADOS ?? Volunteers ??

TOP DOS Bud Stolker (370-2242)

Add Ons

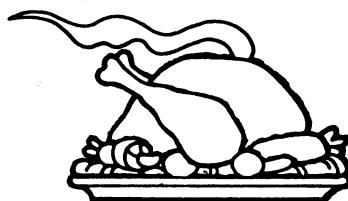
POWER PADS Dick Knisely (476-0529)

KOALA PAD Terry White (849-1725)

Lt.PENCILS, PADDLES, JOYSTICKS James Hurd (978-3867 or 691-1930)

RAMBOARDS James Hurd (978-3867 or 691-1930)

6502 CHIP Bruce Blake (301-599-8888)



WASHINGTON AREA ATARI COMPUTER ENTHUSIASTS

NCAUG NATIONAL CAPITAL

ATARI USERS' GROUP

PRESIDENT	FRANK HUBAND	703/527-4770
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TREASURER	ALLEN H. LERMAN	301/460-0284
MEMBERSHIP	GERALD WHITMORE	301/459-6164
DISK LIB.	MIKE POLLAK	703/768-7664
TAPE LIB.	BRUCE INGALS	703/430-5287

MEETINGS: 3rd TUE, 5:30 to 8:30PM, Room 543, Nat'l Science Foundation offices, 1800 G St. NW, Wash. DC. The closest subway stop is Farragut West on the Blue and Orange lines. Take the 18th St. exit and walk South on 18th against the flow of traffic for three blocks to G St. The building, on the corner of 18th and G, can be identified by a sign for the Madison National Bank on the corner. Parking is available in the building for a fee. The parking entrance is on the West side of 18th St., between F and G Streets.

NEW MEMBERS: Dues are \$15/yr including a subscription to Current Notes. Send check payable to NCAUG, to Allen Lerman, 14905 Waterway Drive, Rockville, MD 20853.

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VP-PROGRAM	FRANK JONES	301/593-1056
DISK LIBRARY	MIKE ABRAMOVITZ	301/483-2363
SYSOP/RBBS	FRANK HUBAND	703/276-8342

MEETINGS: Meetings are held each month in the Author Room of the Public Library in Oxon Hill, Md., located near the Woodrow Wilson Bridge just off the Beltway. From Virginia via the Woodrow Wilson Bridge, stay on the Beltway to Maryland Exit #4 West (St. Barnabas Road). St. Barnabas Rd. merges with Oxon Hill Rd. (right turn at end of exit ramp). Proceed 1/4 mile; the library is on your left. The library phone number is 301-839-2400.

NEW MEMBERS: Dues are \$15/year (includes subscription to Current Notes) or \$3/yr (no subscription). Send check, payable to Reg Brown, to him at 9325 Bent Ridge Rd., Potowac, MD 20854.

MEMBER INFORMATION →

MEMBER INFORMATION

IF YOU WOULD LIKE TO RECEIVE CURRENT NOTES AS A MEMBER OF ONE OF THE WASHINGTON AREA ATARI USER GROUPS, FILL OUT THE FORM BELOW (OR A COPY) AND SEND IT TO THE USER GROUP OF YOUR CHOICE. SEE ADJACENT LISTINGS FOR MEMBERSHIP FEES AND MAILING INFORMATION. IF YOU WOULD LIKE TO SUBSCRIBE DIRECTLY TO CURRENT NOTES, SEND A CHECK FOR \$15.00, PAYABLE TO CURRENT NOTES, TO JOE WATERS, 122 N. JOHNSON ROAD, STERLING, VA 22170.

WASHINGTON AREA ATARI COMPUTER ENTHUSIASTS SUBSCRIPTION/MEMBERSHIP FORM

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NAME : _____ PHONE #: _____

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WASHINGTON AREA ATARI COMPUTER ENTHUSIASTS

AURA

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HARDWARE CORD.	MOE SHERMAN	593-1076

MEETINGS: 1st Thursday of every month, 7PM, Wheaton Library, 11701 Georgia Ave., Wheaton, MD.

NEW MEMBERS: Dues are \$15/year; includes subscription to Current Notes. Mail check, payable to AURA, to Treasurer, AURA, POB 7761, Silver Spring, MD 20907.

FACE

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SECRETARY	JOHN MASCHMEIER	301/211-2470
SYSOP	SAM YU	301/662-5586
BBS		301/644-8983

MEETINGS: Third Tuesday of each month, 7:00PM to 9:30PM, in the Parish Hall behind St. Paul's Lutheran Church, located at 14 West Pennsylvania Ave., Walkersville, MD.

NEW MEMBERS: Dues \$20 yearly per family; includes subscription to Current Notes. Send check, payable to FACE, to Buddy Smallwood, POB 300, Keedysville, MD 21756.

SMAUG

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SECRETARY	DOROTHY LEONARDI	301/839-1363
TREASURER	BOB BARNETT	301/934-2617
DISK LIB.	JIM SANNER	301/884-5840

MEETINGS: 7:30PM on the second Thursday of each month at the John Hanson Middle School in Waldorf, MD. Take MD Route #5. Proceed about 1/2 mile East of the intersection of Route 301 and take first left past the Kinney shoe store to the school.

NEW MEMBERS: Dues are \$15.00/yr, including subscription to Current Notes. Mail check, payable to SMAUG, to Bob Barnett, P.O. Box 612, Waldorf, MD 20601.

NOVATAR

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PROGRAMS	DAVE MEYER	703/455-1145
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SEMINARS	DONNA YARBROUGH	703/255-3467
EDUCATION	DIANA BURDT	703/425-5013
DISK LIB.	M. EVAN BROOKS	703/354-4482

MEETINGS: 2nd Sunday of each month, 5:30 to 8:30PM, in the large Auditorium at the Mash. Gas Light Bldg., 6801 Industrial Rd., Rd., Springfield, VA. From the Northwest: Beltway (I495) to East on Braddock (620); to South on Backlick (617). From the Northeast: Shirley Highway (I395) to West on Edsall Road (648) to South on Backlick. Take a left at the light by Industrial Rd. Washington Gas Light is the second bldg. on the right.

NEW MEMBERS: Dues are \$15/year, including subscription to Current Notes. Send check, payable to NOVATAR, to Curtis Sandler, 7213 Idylwood Court, Falls Church, VA 22043.

MACUG

WOODBRIDGE ATARI COMPUTER USERS' GROUP

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SECRETARY	MIKE STRINGER	703/786-8755
TREASURER	CURT PIERITZ	703/494-3704
LIBRARIAN	ARMIE TURK	703/670-2547

MEETINGS: Monthly, 7-10PM, usually on 3rd TUE, in the Community Room, Potowmac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Exact dates: OCT 15, NOV 26 (4th TUE), DEC 17, JAN 21, FEB 18, MAR 17 (3rd MON), APR 15, MAY 20, JUN 17. Entering Woodbridge from either the North or South on Route #1, proceed to the intersection of RT #1 and Opitz Blvd. (adjacent to Woodbridge Lincoln-Mercury). Turn West on Opitz and take the first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building.

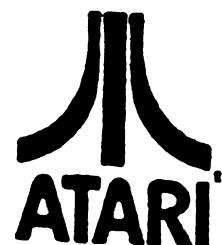
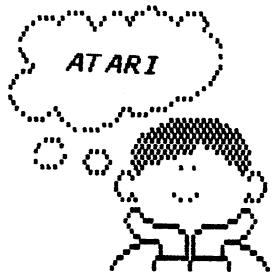
NEW MEMBERS: Fee is \$10/per yr plus \$1.00 monthly dues; includes subscription to Current Notes for members in good standing. Send checks, payable to MACUG, to Mike Stringer, 709 Rutherford Drive, Fredericksburg, VA 22401.

ATARIFEST '85

SATURDAY, NOVEMBER 9

10:00 A.M. - 4:00 P.M.

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